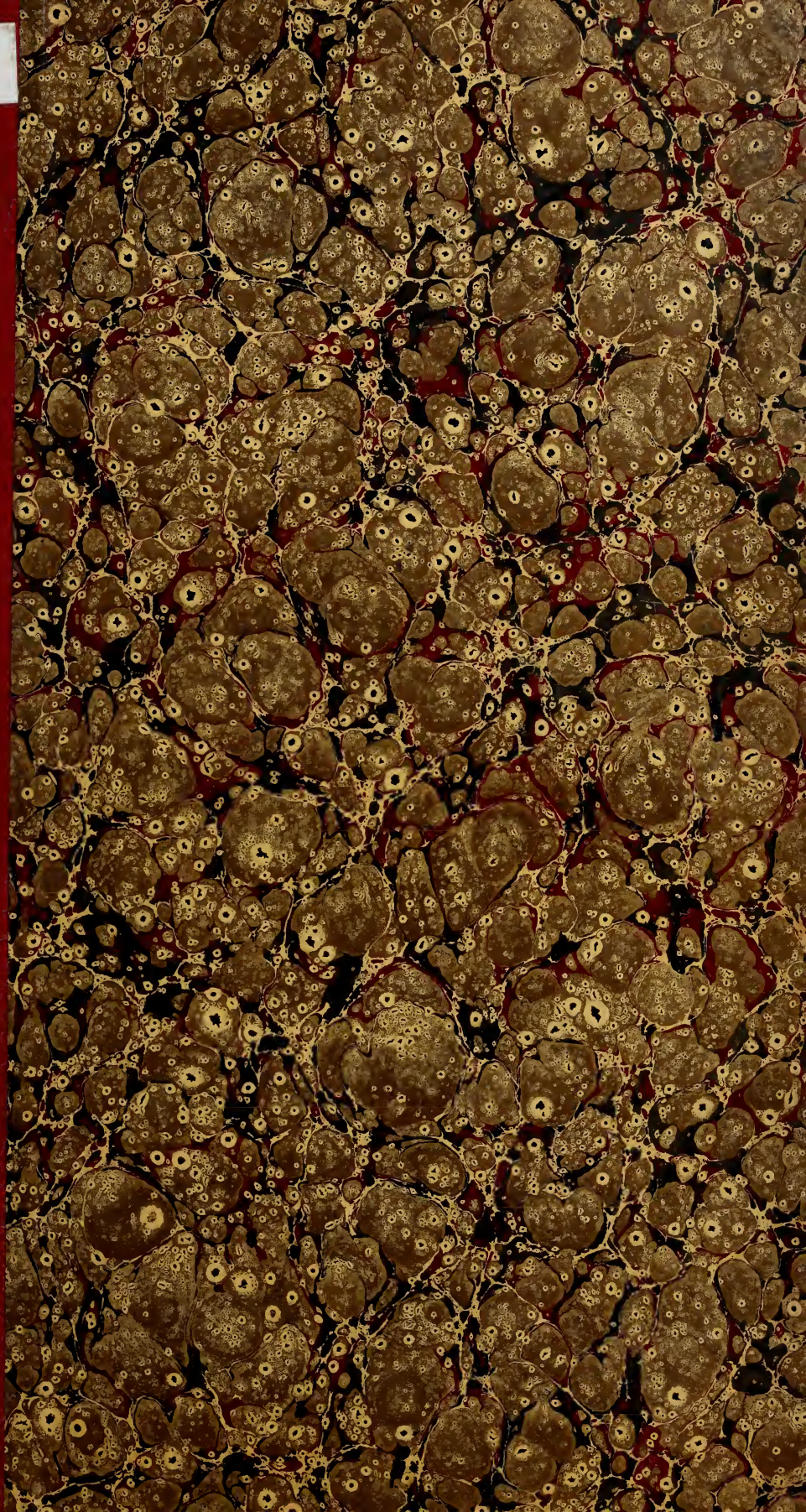


COUNTWAY LIBRARY

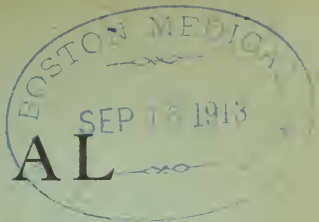


HC 3179 2



BOSTON
MEDICAL LIBRARY
8 THE FENWAY

THE JOURNAL



OF

THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 1 AUG., 1913. \$2.00 per year

Association Number

TRANSACTIONS

General Session	1429
House of Delegates	1439
Council	1497
Report of Secretary	1440
Report of Treasurer	1483
Report of Necrologist	1433
County News	1498
Personal News and Notes	1499
Book Notice	1500

For advertising space write to
MAINE MEDICAL JOURNAL,
Portland, Maine

PRESIDENT — The next paper is by Dr. Stanwood E. Fisher, "The Role of the Nose, Throat and Ear to General Diseases."

Dr. Fisher reads paper, followed by discussion.

It was unanimously voted that the papers be referred to the Committee on Publication.

PRESIDENT — Is there anything further to be taken up in this section of our meeting? If not, we will pass on to the regular session.

The first paper in our regular session is "Heroin Addiction" by Dr. Paul K. Sellew of Brookline, Mass.

Dr. Sellew reads paper.

PRESIDENT — You have heard Dr. Sellew's paper. What shall we do with it? Shall it be referred to the Committee on Publication?

It was unanimously voted to refer the paper to that Committee.

PRESIDENT — The next paper on the program is "The Alcoholic Psychoses," by Dr. F. C. Tyson, of Bangor.

Dr. Tyson reads paper.

PRESIDENT — The paper will now be referred to the Committee on Publication. It is now quarter past twelve. Shall we continue this session, which calls for Dr. Welch's paper on "Artificial Pneumothorax," or adjourn until two o'clock?

It was unanimously voted that the meeting adjourn until two o'clock.

Adjourned.

W. BEAN MOULTON, *Secretary*.

AFTERNOON SESSION.

Portland, July 2nd, 1913.

The meeting was called to order at two o'clock in the afternoon, President Marsh in the chair.

The President stated that the first paper to come up for consideration was that of Dr. F. J. Welch, on "Artificial Pneumothorax."

Dr. Welch reads paper.

The President then called Vice President Hardy to the Chair, while he presented his annual address.

VICE PRESIDENT HARDY — I believe it is the custom to refer the President's address to a Committee appointed by the Chair, and I will

appoint as that Committee Hiram Hunt, George Campbell, G. M. Woodman, to consider the address and report at a later session of the Association.

PRESIDENT MARSH — We are now to be favored by an oration on "Typhoid Fever," by one of the noted men of Massachusetts, Dr. David L. Edsall of Boston.

Dr. Edsall reads paper.

It was moved by Dr. Owen P. Smith that a rising vote of thanks be extended to Dr. Edsall for his excellent address. The motion was unanimously carried.

PRESIDENT — The next paper to come before us is that of Dr. F. N. Whittier of Brunswick, "Latest Laboratory Tests which are of value in Diagnosis."

Dr. Whittier reads paper.

It being late in the afternoon, Dr. Whittier's paper passed to the Committee on Publication without discussion.

The next matter on the program was the paper read by Dr. William H. Wilson of Ft. McKinley, "Prophylaxis in the Army."

Dr. Wilson reads paper.

Dr. Wilson's paper was discussed by Dr. Dickison and Dr. Edsall.

PRESIDENT MARSH — The next paper to be considered is that of Dr. F. E. Leslie of Andover, "The Etiology of Goitre."

Dr. Leslie reads paper.

PRESIDENT — The paper of Dr. Leslie is now open for discussion. Does any member wish to say anything in relation to this paper?

If no one has anything to say, the paper will pass along to the Committee on Publication. As this is the last paper on the program, if there is no further business, a motion to adjourn is in order. I want to say before we adjourn that the House of Delegates will meet tomorrow morning promptly at nine o'clock, and, as there is quite likely to be a good deal of business to come before that body, I would ask that we have as large an attendance as possible, and that you all plan to get there early.

On motion, the session voted to adjourn, to meet at ten o'clock on the following morning, July 3rd, at the same place.

Adjourned.

W. BEAN MOULTON,
Secretary.

THURSDAY MORNING.

Meeting called to order by the President, in the "Symposium on the Treatment of Compound Fractures."

Hiram Hunt of Greenville presented a paper on "Conservative Treatment."

W. C. Peters of Bangor read a paper on "Radical Treatment."

A. D. Sawyer of Ft. Fairfield took up "The Treatment of Fractures with Lane Plates."

The papers were discussed collectively by Alfred King, W. C. Peters, B. P. Sturgis, and J. A. Donovan.

The next paper on the program was by W. Bean Moulton of Portland, "Ectopic Gestation; the Symptom-Complex of its Early Stages."

This paper was discussed by John F. Thompson and Adam P. Leighton, Jr.

The next paper was by Adam P. Leighton, Jr., of Portland, "The Cause and Cure of Eclampsia."

This paper was discussed by E. E. Holt.

This closed the business for the morning session, and the meeting was adjourned to two o'clock in the afternoon, at the same place.

Adjourned.

W. BEAN MOULTON,
Secretary.

THURSDAY AFTERNOON.

The meeting was called to order at two o'clock, President Marsh in the chair. The first paper on the program was "Radiography," by F. W. Lamb of Portland. This paper was illustrated by the use of X-Ray photographs and the stereopticon.

The discussion of the paper was postponed until the paper of W. R. McAusland of Boston, should have been read, as this paper was along the same line of work, and it was suggested that the two papers be discussed at the same time.

Dr. McAusland's paper was "Knee Joint Surgery" with Lantern Slide Illustrations.

PRESIDENT — As this concludes the papers on the program, the next matter to come before you will be the report of the Committee on Necrology, Dr. J. A. Spalding.

I regret to announce the death of the following active members of our Association since our last meeting, and to add that a few kind words concerning the career of most of them have already appeared in our Journal. Similar words concerning all of them shall appear from time to time, so long as your Necrologist is permitted to work in his present capacity.

I name the members deceased in the current year :

JOSHUA WILLIAM BEEDE, Auburn.
WILLIAM COWIE, Guilford.
WOOSTER PARKER GIDDINGS, Gardiner.
DANIEL WILLIAM HAYES, Foxcroft.
SAMUEL BEECHER HUNTER, Machias.
IRVING ELLIS KIMBALL, Portland.
CHARLES WALLACE PRICE, Richmond.
LEANDER DIXON RAND, Fairfield.
EDWARD MARINA SMALL, Eastport.
WILLIAM WALLACE THOMAS, Yarmouthville.
JOHN MORSE WAKEFIELD, Warren.
AMBROSE HERBERT WEEKS, Portland.
ALBERT WOODSIDE, Rockland.

I cannot refrain from saying a word concerning Dr. Weeks who so lately was here amongst us, and whose election to a Professorship in the Medical School of Maine, was announced only two days before his death. His sudden taking away writes indelibly upon our minds the uncertainty of human life, and the inefficacy of medical skill in certain emergencies of disease. Of Ambrose Herbert Weeks it can be truly said that he died lamented; a promising man, at the opening of a new career of instructive usefulness in our Medical School of Maine.

I have additionally, to report that in accordance with the opinion of the Association that an effort should be made to collect the records of living members, I caused to be sent to each one a Return Post Card, asking for information in as succinct a form as the space would allow. I have received four hundred replies and am hoping that every member will finally do his duty. I regret that some did not understand that all that is necessary in the case of a Return Post Card is to tear off the half addressed to me and forward it without additional postage. I am also sorry that many forgot their middle names, although I set them an example by putting my own on the Return. A good many have paid no attention to the business, possibly because they hated to make their wills. But I have said before and I repeat it, that I cannot understand why any member should object to handing in his record, nor why he should not want his career perpetuated on the records of the Association. We choose a Necrologist to say a few words concerning each member, at the end of his life, and any information ready at hand assists that official in his mournful duty when occasion demands.

JAMES A. SPALDING.

PRESIDENT — You have heard the report of your Committee on Necrology. What is your pleasure in regard to it?

It was unanimously voted to accept it and place the same upon the record.

PRESIDENT — We will listen to the report of the House of Delegates, Dr. Moulton.

DR. MOULTON — The meetings of the House of Delegates have been well attended and a great deal of important business, principally of a routine character, has been transacted.

It was voted to hold the next meeting as early in June as possible so as not to interfere with the meeting of the American Medical Association, a little difficulty having been experienced this year along that line.

There was considerable discussion in regard to remodelling our present Registration Law, and a special committee was appointed to look the matter up and make a report at the next annual meeting.

There was also a prolonged discussion regarding the matter of going to the next Legislature prepared to accomplish something of having some definite proposition in hand so that conditions would be different than has been the case for the past years, especially in the matter of opposing the so-called rights of the osteopaths and other cliques. The question of contract practice was also taken up and discussed at some length, and a Committee appointed to recommend action in the different County Societies along this line.

It was voted to continue the Journal another year, and numerous other Committees of various sorts were appointed. Full reports of the transactions will appear in the Journal and on this account it seems unnecessary to make any more detailed report at this time.

The list of officers elected for the ensuing year was read.

List appears in proceedings of House of Delegates.

PRESIDENT — We will now have the report of the Council.

SECRETARY — The Council has nothing of especial importance to report except the complaint of Dr. Gage of Swan's Island in regard to the registration of Dr. Fuller there. The Council deemed it best to report the matter before this session. Is Dr. Gage present? He and Dr. Searle appeared before the Council.

PRESIDENT — Dr. Gage, you will please present this matter to the members of the Association.

To the Council of the Maine Medical Association:

I wish to call the attention of the Council to the action of, and position taken by the Board of Medical Registration, with reference to a certificate issued to Dr. A. J. Fuller.

Dr. Fuller made at least two applications to the Board for registration under the reciprocity regulations, before the application upon which his certificate was granted. At the time of the second formal application, a hearing was appointed, and, while the papers were informal and a hearing was not had, the parties were there, and the Board was otherwise fully informed as to the moral qualifications and professional ethics of Dr. Fuller. It stated that upon subsequent application an opportunity for all parties to be heard would be given.

Upon a subsequent application being made, without any meeting of the Board, a majority of the members thereof ordered the issuing of a certificate, and without any notice.

I understand that the Chairman of the Board, and I assume a majority of the Board, from their having issued the certificate, take the ground that, under the reciprocity arrangement, they have nothing to do with the doctor's qualifications as to moral character.

At the time the certificate was granted, I understand they were preparing in Vermont to have the Vermont certificate revoked, and have since made application to the Medical Board for that purpose, on which application a hearing is to take place on the 7th of July.

An application has been made to the Maine Board to revoke the certificate which they have issued for irregularity in the granting thereof, and because of the immoral character and non-professional conduct of Dr. Fuller.

If the position of the Medical Board that, in the case of a doctor from another State, they have nothing to do with his record or character, is correct, steps should be taken to change matters in that respect.

I request that the Council look into this matter and take such course as may be possible to have the Board of Medical Registration properly perform its duties, and, if our law is such that a person totally devoid of character must be admitted because he has his certificate in some reciprocal state, that steps be taken to change the law in that respect.

I do not, however, believe that in cases of reciprocity the law attacks the discretion of the Board of Medical Registration.

(Signed) I. B. GAGE.

PRESIDENT — Gentlemen, you have heard the facts as given by Dr. Gage. The matter is now open and before you for discussion.

DR. HARDY — At the Board of Councillors this morning, this matter was brought up and the members did not feel that they ought to take any action other than to refer the matter to the Association. As I understand it, I know nothing about the matter except what was stated there that they thought the members of the Board of Registration had been negligent in the matter of issuing this certificate. As I understand it, the certificate was issued without any regular meeting of the Board being held — in fact only four members of the Board were favorable to issuing the certificate. The Secretary informed us this morning that he was directed to issue the certificate by the Chairman of the Board, over the telephone.

The Council did not feel that at this time they ought to interest themselves in the character of Dr. Fuller, but they thought it would be

advisable right here to bring the method of the issuance of these certificates before this Association.

We were further informed that some organization, either the American Medical Association or the Carnegie Institute, or some institution of this kind, is interested in this matter and wanted it brought before this meeting so it might have some kind of standing or expression. I had never heard of the case until Dr. Gage came before the Council this morning, and I don't think any of the members present were familiar with the case. The matter of spanking the State Board of Registration, if it is advisable to do that, the Councillors did not wish to take upon their shoulders and so they have asked me to represent their position to this body and let you know how they felt about it.

DR. HILL — Inasmuch as this matter has been brought to our attention and the time is so short before adjournment, I move that it be referred back to the Council for the proper action. It seems to me that the Council has all the powers necessary to deal with a situation of this kind.

SECRETARY — I would say that, inasmuch as this man Fuller is not a member of this Association, it would seem to me as though this were a matter to be fought out with the Board of Registration rather than with this body.

DR. CUMMINGS — I understand that there was a false affidavit sent to the Board of Registration with no seal upon it of any association — that it was forged. That was another thing.

DR. HARDY — It was not forged as I understand it — merely that the man who made it was not a member of the County Society.

PRESIDENT — Is there a member of the Board of Registration present here this afternoon?

No member of the Board of Registration was present.

PRESIDENT — It is moved and seconded that this matter be referred back to the Council for action. If that is your mind, you will please make it manifest in the usual manner.

The motion was seconded and unanimously carried.

PRESIDENT — Are there other Committees to report? Is there anything further to come before the general session? If there is nothing further, the next matter in order will be the election of President for the ensuing year.

DR. WILLIAMS — Mr. President and Members of the Maine Medical Association: We have with us here today an esteemed member of this Association — one whose services we have found almost in-

valuable, one who is a credit to this Association, whom it is always a pleasure to listen to, whose written and spoken word is alike full of courage, helpfulness and inspiration, one whose efficient devotion to the best interests of this Association and of its individual members as well have brought harmony to the meetings at all times — a man who has long honored the Association and whom the Association, I am sure, will delight to honor: I would nominate, with great pleasure, as President of the Maine Medical Association for the ensuing year, Dr. W. C. Peters of Bangor.

DR. CUMMINGS — It is with great pleasure that I second the nomination of Dr. Peters. I know him to be a man well qualified for this position and I am sure he will serve us most efficiently.

DR. ADDISON S. THAYER — I have great pleasure in seeing Dr. Peters nominated and I would like to see him elected to the Presidency of this Association for the ensuing year. I am sure his term of office would be one of great fruitfulness to us all.

DR. E. E. HOLT — I most gladly second the nomination of Dr. Peters. He will be a valuable man at the head of this Association.

PRESIDENT — Are there other nominations?

DR. HARDY — I move that the Secretary be instructed to cast the ballot of the convention for Dr. W. C. Peters of Bangor for President of this Association for the ensuing year.

PRESIDENT — You have heard the motion of Dr. Hardy. If that is your mind, you will so vote.

The vote was unanimous.

PRESIDENT — I take pleasure in announcing that Dr. W. C. Peters has been elected the President of this Association and I will appoint our Secretary a delegate to produce Dr. Peters.

Dr. Peters appears with the Secretary amid hearty applause from the assembled members of the Association.

DR. PETERS — Mr. President and Gentlemen of the Maine Medical Association: It is hardly necessary for me to say that I am quite overcome by the honor you have showered upon me and the responsibility as well of this position to which you have elected me. It is time to adjourn this meeting and I shall not take your time to make any extended remarks. I would however, like to say just a word in regard to the tremendous scientific advance which has been made in the medical field during the last few years. Because so much has been learned, we see the importance of the work before us. The question of the public health is perhaps one of the most important to come before the legislative bodies during the next three or four years. For

that reason, I feel it is the duty of this Society to do all that it possibly can to enlighten those bodies as to what is possible. Its duties are both great and grave in this connection and it will be well for us all to be up and doing—those of you in the House of Delegates, those of you who are members of the Council, and each individual member in this Association. There are many things to come before our Legislature two years from now which will need very careful preparation. I shall certainly try to do my part in these matters, and you will be called upon to help. I hope you will each one do all you can for the progress of this matter of public health medical education, and for the progress of this Society in that work and in every other work in which it may be engaged. Gentlemen, I thank you for the great honor you have conferred upon me in electing me as your President, and I promise you that I will serve you to the best of my ability at all times and under all conditions.

PRESIDENT — Gentlemen, the boat which is to convey us to the islands for the clam-bake, is supposed to return to the wharf at four o'clock with the ladies, and you will please be there at Custom House Wharf ready for it. If there is nothing further to come before the meeting, a motion for adjournment is now in order.

DR. HARDY — Dr. O'Connor spoke to me about this matter of contract practice, and he suggested that we have the resolutions passed here before the general session. So, if it is not out of order to take it up at this time, I would suggest that that be done.

PRESIDENT — This is the matter in regard to the members of this Association doing lodge work for a fee of two dollars a year for attending a whole family. It seems this is being done by some of the members of this Association who are in good standing in the County Societies, in fact, officers in the County Societies. A committee was appointed by the President to prepare resolutions in regard to this matter, and I would ask our Secretary to read those resolutions to the general body.

Resolution on contract practice read by Dr. Moulton.

PRESIDENT — The County Societies appear to want some expression of the Association as to this matter—a definition perhaps of what is considered ethical and non-ethical contract practice. Of course some contract practice everybody admits is all right—that is if a man gets regular rates for whatever services he renders, but the County Societies wish to stamp out this matter of doing work for the sum of two dollars a year—this work to cover the work of an entire family, no matter how large the family might be.

Resolution endorsed.

PRESIDENT — If there is nothing further will some one make a motion to adjourn?

DR. HUNT — I wish to make a motion that a rising vote of thanks be tendered our retiring President for the efficient manner in which he has served us, and the Association.

The motion was unanimously carried and with enthusiasm and the meeting was permanently adjourned.

Adjourned.

W. BEAN MOULTON,
Secretary.

House of Delegates.

Portland, Maine, July 2nd, 1913.

The first meeting of the House of Delegates was called to order in the Council Chamber of the City Building at 9 A. M., July 2nd, 1913, the President, Dr. R. H. Marsh of Guilford, in the chair, who stated that because of the fact that there was a great deal of business on hand to be disposed of, he hoped everybody would be as prompt as possible.

The President then called for the report of the several Councilors.

Dr. Cochrane of the First District was absent and no report was presented.

PRESIDENT — Is Dr. Cummings of the Second District here?

SECRETARY — Dr. Cummings has not come in yet.

PRESIDENT — We will listen to the report of Dr. Coombs, from the Third District.

DR. COOMBS — I will have to write out my report and hand it in later. I have not yet had an opportunity to prepare it.

PRESIDENT — Is Dr. Campbell present? We will listen to his report.

Mr. President and Members of the House of Delegates:—

Waldo County has held one meeting with an attendance of thirteen members present, or members and guests. They have a membership of twelve. Somerset County has held one meeting which took the form of an outing during the month of June, and which was held at Belgrade. Their membership is fifteen.

Kennebec County has held two meetings, one at Augusta and one at Waterville. They have a membership of sixty-one paid members, with an attendance of twenty-eight at the first meeting, which was held at Augusta, and thirty at the Waterville meeting. They have had two speakers from outside the State, Dr. Nichols of Boston, and Dr. John McCrae of Montreal, and their meetings have been very interesting and the members are enthusiastic and appear to be anxious to advance the interests of the Society.

The report was accepted and ordered turned over to the Committee on Publication.

PRESIDENT—Is Dr. Wakefield of the Fifth District present?

Mr. President, Fellow Councillors and Delegates:—

As Councillor of the Fifth District, I beg leave to submit my third annual report:

WASHINGTON COUNTY.

It was not possible for me to visit Washington County this year but I am informed from reliable sources that three successful meetings have been held; that the attendance was good, and the literary exercises of the highest order.

Several new members have been added, one re-instated and none lost, so that the present membership is thirty-seven—quite a substantial gain over last year.

HANCOCK COUNTY.

The Hancock County Society has held six successful meetings during the year, all of them being on Mount Desert Island.

Excellent papers were read during the summer months by men of prominence from the large medical centres.

Six new members have been added and none lost, so that the present membership is twenty-eight.

This has been the most successful year of the society's existence.

On the whole, I believe that the work in the Fifth District has been very satisfactory.

Dr. Wakefield's report was accepted and ordered spread upon the record.

PRESIDENT—Is Dr. Peters of the Sixth District present?

Dr. Peters was not in the house but was expected later.

PRESIDENT—We will listen next to the report of the Secretary, Dr. Moulton.

DR. MOULTON—I will merely make a brief verbal report. I will say that the principal difficulty which I have experienced as Secretary has been in getting the reports of the County Secretaries as to their changes in membership and various matters of that kind. I have sent them cards to fill in and return whenever they have a change in member-

ship, and I think in the course of the year I have received not more than fifteen or twenty of these cards back. For that reason it is absolutely impossible to keep the mailing list up-to-date, and each individual member will occasionally have a kick coming that he does not get his Journal. He will write in to the editor or to somebody and kick about it. The State Secretary has absolutely no means of knowing that he has joined the Society or been dropped, or anything else unless the County Secretary keeps his reports up-to-date. At the present time, we have one county from which we have had no report at all and officially our worthy President is not a member of the State Association—that is just an example of the thing that might happen by neglecting to keep up these reports properly. I had the pleasure of meeting the Secretaries from all over the country at Chicago in September of last year; there were thirty-four Secretaries present from all over the United States, and this thing was threshed out very thoroughly. They all said they were up against the same thing, and their recommendation was to make the fiscal year of the societies correspond with the calendar year and square the books the first of January. Personally, I rather think the fiscal year should be made to end the first of the month preceding the annual meeting, from what experience I have had, and should make that recommendation. I think that is about all I have to say at this time, there will be things coming up later no doubt that I shall wish to speak about.

PRESIDENT — What time are the books closed now?

SECRETARY — It does not appear in the by-laws at all. It has been customary for the Treasurer to close the books the first day of June, this year he closed them the first day of July.

PRESIDENT — Is not there a By-Law in the County Societies that requires the membership to be reported by April 1st?

SECRETARY — No. The membership is to be reported on or before June 1st, I think, if I remember rightly.

PRESIDENT — What will you do with the report of the Secretary?

Moved and seconded that the report be accepted and made a part of the record.

PRESIDENT — We will next hear the report of the Treasurer.

(Treasurer was absent and report temporarily delayed.)

PRESIDENT — We will hear the report of Dr. Gilbert, the editor of the Journal.

The Journal of the Maine Medical Association has just closed its third year of life, so that it is still in its infancy. Its present value to this body cannot be traced to any individual member, but to all who have interested

themselves in the publication, and more particularly to the members of your Editorial Staff, who have given freely of their time and energy.

I can only express my appreciation for the co-operation of the officials and co-editors during the time I have served as your managing editor. I am pleased to report that there are funds in the treasury, and at no time during its three years of existence have we exceeded our appropriation, but our efforts to keep the library open has been more or less a failure owing to lack of enthusiasm on the part of the profession.

During the past year, books have been added to the library through the Journal Exchanges, making a total of — volumes.

We have reached a period when certain changes can be made to an advantage in connection with the Journal, and the work of the Association.

First: Elect one member as Secretary of this Association and Editor of your Journal, and increase his salary from \$200 to \$500. This amount will not cover the cost of a good stenographer, but would suffice for a few years.

Second: Do not appropriate a fixed sum per year, but limit the amount to be drawn to \$800 or \$900 per year.

Third: Make your Secretary-Editor serve as delegate to the American Medical Association, and pay the expenses of his attendance at the annual session, not to exceed \$100.00.

The above plan has been adopted by the majority of States having Journals, and proved so satisfactory that in a few States one member has served over a number of years, and is not only valuable to his association at home, but is thoroughly familiar with the National House of Delegates, and stands ready to oppose any unwise legislation.

The question of a Medical Defence Fund should receive careful consideration by this Society, inasmuch as it has been adopted by the majority of the States and proved of great value in uniting the profession for the common good of all.

There are still over four hundred physicians who are not members of the Maine Medical Association, and I am quite firmly convinced that if we could offer sufficient inducement to the members who would be unable to attend the county meetings, to join our Society, we would include nearly all of the above mentioned non-members.

During the past year or two, the Journal has been of some assistance to the County Societies in securing available men to read papers at their meetings.

We are in a position to know of the various papers read before local medical bodies, and can readily ascertain whether or not they would be of value to the County Societies, and should occasion demand, we could hold a list in readiness to be used at short notice.

When a physician sends in his subscription to the Journal we refer him to his County Secretary, urging him to make application to his County Society.

We have also taken a list sent in by the County Secretary of available men, who are not members of their County Society, and written them personal letters, accompanied by a copy of the Journal. This has proved of some aid in securing new members.

If the medical profession desires to accomplish anything along the lines of improved medical legislation, it must first organize more thoroughly, and aim to include every available man in our State, on our list of members. At the present time, the Journal offers to the out of city man the only inducement in many instances for continuing his membership. If we could strain a point

and add to this a Medical Defense Fund, together with other measures for inducing men to join, we could ultimately reach the above results.

PRESIDENT — Gentlemen, you have heard the report of the Editor of your Journal. What shall we do with it?

It was moved and seconded that the report be accepted and made a part of the record.

PRESIDENT — The next matter to come before us is the matter of the fixed annual assessment, and I will call upon the Secretary to explain the meaning of this.

SECRETARY — According to the By-Laws, the assessment must be fixed by the House of Delegates. It has always been two dollars a year up to the present time, and I would suggest that it remain at two dollars a year for next year, if some one would make that as a motion.

It was moved and seconded that the annual dues of the Society remain at the amount of two dollars a year, the same as in years past, and was so voted.

SECRETARY — It occurred to me that formerly the House of Delegates was supposed to meet the day before the meeting of the annual session of the Association. Now the difficulty arises that if we meet in the early part of the day, previous to going into the regular session of the Association, we get about as many present at that meeting as we have here this morning. When the members have in mind that the meetings begin at ten o'clock, they will not come in the night before and the trains do not get them here early enough for this morning meeting. They plan to leave home so as to get here at ten o'clock and to do that they have to miss this meeting of the House of Delegates. I think if we could plan to have this meeting of the House of Delegates the night before the first day of the general session that we should be able to get rid of a lot of business in that way. I think most of the delegates here could have been present at a meeting last night if such meeting had been called, and in that way we might have been able to clean up a lot of business and get it out of the way before the general sessions begin. I merely make this as a suggestion and so that these meetings need not conflict with any of the meetings of the different sections of the general session. I think we would have just as many present, and perhaps more.

It was moved that the first meeting of the House of Delegates be held at eight o'clock the night previous to the opening of the general Association meeting.

DR. MOULTON — Of course that necessitates the amending of the By-Laws so that the meeting may be called for that time. I would suggest that Chapter 4, Section 1, of the By-Laws be amended, so that

the House of Delegates shall meet at eight o'clock in the evening of the day preceding the opening session of the Association.

It was moved and seconded that Chapter 4, Section 1, of the By-Laws be amended so that the first meeting of the House of Delegates should be held at eight o'clock in the evening of the day preceding the opening of the annual meeting of the Association, and the same was unanimously voted.

PRESIDENT — We will now hear the report of the Committee on Venereal Diseases and their Prevention, by Dr. Whittier of Brunswick.

Mr. President and Members of the Association: —

In the report of your committee presented June 14, 1912, it was stated that a fund of \$485.72 had been contributed to carry on the work of the committee. In addition to this fund the Board of Councillors recommended an appropriation of \$50.00 from the fund of your Association; this made \$535.72 available for carrying on the work of the committee.

Following is a summary of the receipts and expenditures to date:

Received from contribution as per list in 1912 report,	\$485.72
Received from the Maine Medical Association,	50.00

Total,	\$535.72
--------	----------

BILLS PAID OUT.

Bills O. K. by Chairman and paid by Treasurer,	\$ 50.00
Literature,	2.50
Telegram,	.25
2,000 Copies of "Boys' Venereal Peril,"	40.00
Stamps,	40.76
Clerical work,	84.69
Express,	4.90
Printing,	13.25
Stationery,	14.40
Total,	\$250.75

Amount on hand July 2, 1913,	\$284.97
------------------------------	----------

The funds of the committee are deposited in the name of the committee in the Brunswick Saving Institution.

In the report of 1912, your committee made the following recommendations:

1. That your committee be empowered to work with the State Board of Health in disseminating information among the superintendents of schools and parents upon sex hygiene and the danger of venereal infection.

2. That your committee be empowered to develop public opinion for including syphilis, gonorrhea and chancroid in the list of infective diseases, made reportable by law, provided such venereal diseases be reported by number and not by name.

Your committee has made an effort to carry out the above recommendations. A letter was sent to the State Superintendent of Schools, describing the work of the committee and asking for his support and co-operation. A reply from this communication was received in which he promised co-operation. He sent addresses of a considerable number of town Superintendents to whom he advised that letters be sent.

Your committee sent letters to each one of the town Superintendents on the above list, describing the work of the committee and asking for their co-operation, especially in the matter of furnishing addresses of parents having children of grammar school age. The town Superintendents responded very generally from this request and the committee received from all parts of the State a great number of addresses of parents.

It was stated in the 1912 report that it seemed to the committee that one of the best ways of carrying on a campaign of education of the public as regards the prevention of venereal disease was according to the plan advocated by Dr. Bailey of Harvard, of sending carefully worded circulars of information on sex hygiene to parents with the request that the parents read them and if they found nothing questionable or objectionable in them to give them to their children to read when they reached a suitable age, and accordingly the following letter has been sent out to the parents, whose addresses have been received from the town Superintendents:

Dear Sir or Madam: —

Under separate cover, we are sending you a small pamphlet for boys in regard to sexual hygiene. Our committee is sending a number of such pamphlets to parents of boys of grammar school age, in various parts of the State. It is the belief of our committee that many boys would be saved from contracting venereal diseases were they familiar with the facts set forth in this little book. Therefore, we ask you to read its pages carefully and then decide if it does not contain truths which you think your boy should know. If you conclude it may benefit your boy to have these facts from a reliable source rather than depend for such information on what he inevitably hears from his playmates and elsewhere, will you not prepare him for the pamphlet by a few well chosen words of your own and then let him read it or read extracts from it to him as your judgment dictates.

If you have already taught your boy all you think is necessary, then this letter and pamphlet are not for you. If on the other hand, you do not agree with our views, won't you help us by writing frankly your criticism to me?

I enclose a copy of report of our committee made to the Maine Medical Association, June 13, 1912. This will give you an idea of the lines along which we are working and what has been accomplished.

Very truly yours,

The committee also sent out letters to the members of the Maine Medical Association, enclosing previous reports, explaining briefly the work of the Committee. Many helpful suggestions were received from individual members of the Association.

It is the hope of your committee that its work has already contributed toward carrying out the second recommendation, but it also asks that the committee be continued, in order that it may have time to carry on the work further, that has been begun.

(Signed) F. N. WHITTIER, M. D., Brunswick.
A. L. STANWOOD, M. D., Rumford.
E. E. HOLT, M. D., Portland.
F. H. JACKSON, M. D., Houlton.
A. S. THAYER, M. D., Portland.

DR. WHITTIER — I would like to say in addition to this report that while we have not spent all our money, and have not spent the fifty dollars you appropriated to us last year, we would like to have you make us the same appropriation this year even though we have \$284 in our treasury. It is easy to spend that amount of money, and aside from that, it would show also that we had the backing of this Association, if we could say that we had received this amount of money from the Association this year the same as we did last year. That money has helped us a great deal and the Committee can much more easily go out and get more money as they did with the fund which I have already described, and if we could have the same amount this year, it would help us very materially in getting more. We can still continue to go around and tell the people that the Maine Medical Association has again contributed toward the fund. We think you have all probably received the pamphlets that we sent out to the parents, but I brought in a supply of them with me so that if any one of you has not happened to receive one, you can get one here and look at it if you wish. We have also printed copies of the reports of this year and last and also a great number of letters which have been received from different sources, especially from members of the Association, many of which are very helpful. We have received some letters from the parents and we have received nothing whatever in the way of criticism. Such letters as we have received indicate that the parents are grateful for what we are doing and that they are disposed to help us as much as possible in carrying out the suggestions made to them.

PRESIDENT — You have heard the report of your Committee on Venereal Diseases. What will you do with it?

It was moved and seconded that the report of the Committee be accepted as offered and that fifty dollars be appropriated by the Association for the further extension of the work, or that such appropriation be referred to the Council for further order.

The motion was unanimously carried.

PRESIDENT — We will next listen to the report of the Committee on Cancer.

SECRETARY — I have the report of that Committee, duly signed, and forwarded to me, as Dr. Jackson is unable to be present. I will read the report, which is as follows:

Mr. President, Members of the House of Delegates: —

In submitting its report for the work that has been done on the subject of cancer for the past year, your committee desires to tender its grateful thanks to the members who have made the work so successful. While hearty

co-operation has been accorded efforts along these lines, by many of the County Societies, others have been more or less apathetic. We feel, however, that the work in general throughout the State has resulted in benefit to us as individuals and to the various communities which we serve.

That the entire profession is awake to the strong need of education, concerning all forms of cancer, is made evident by the resolutions passed at recent meetings of the Congress of Clinical Surgeons and the American Gynecological Society. Active steps are now in progress to form a National Society for the advancement of the work. Such a movement, it goes without saying, should and will be accorded the heartiest support by this Association and we bespeak for it your careful consideration.

At the time of the formation of this Committee it was urged that articles in the lay press be published regarding cancer of the uterus and breast. In the light of work that has been already done, it seems to us impossible to have such articles presented in this manner for the following reasons. You can readily understand that such articles would be obliged to be written in terms that would be far from direct. The necessary plain English that one would be obliged to employ to be convincing would, we fear, be so distasteful that the results of our efforts would be destroyed to a certain extent. It strikes us that a far more effective mode is the presentation of these subjects before lay audiences by men who are interested in the work for there is nothing so effective for directness as the spoken word. The various women's clubs undoubtedly give us a field for such work and we feel that their hearty co-operation would be given us if asked for.

It is certain beyond dispute that up to date we have nothing to offer the average case of cancer except radical removal by surgery. To expect to obtain results in these lines, the surgeon must have his material at a time when extension is extremely limited or absent. Surgical technic has obtained to the point where nothing more can be expected and it is clearly up to the general practitioner to make his diagnosis early. Pessimism in operative results has obtained, we fear, from the cases that have been neglected until it is clear that only palliative measures can be employed.

We would recommend the continuance of your Committee, ask for the hearty support of all officers of the various County Societies and the earnest support of whatever plan that is recommended by the various surgical organizations now engaged in a determined effort to aid in this most important work.

Respectfully submitted,

F. H. JACKSON,

S. E. WEBBER,

GEO. B. SWASEY.

PRESIDENT — What will you do with the report of your Committee on Cancer?

Moved and seconded that the report be accepted and referred to the Committee on Publication.

PRESIDENT — We have usually contributed fifty dollars to this work, have we not? Shall we make the same appropriation this year?

DR. GILBERT — Yes, the Association has usually contributed fifty dollars, and I move that the Committee be continued under the same conditions as last year.

It was so unanimously voted.

PRESIDENT — We will listen to the report of the Committee on Visitors to the Medical School of Maine.

(The members of the Committee were absent and no report was made.)

PRESIDENT — You will remember that we appropriated one hundred dollars for a scholarship in the Medical School of Maine. What shall we do with this matter this year? Shall we continue the appropriation or is it your mind to discontinue it?

DR. HARDY — Mr. President: I think this appropriation which was made to the Medical School last year was very greatly appreciated by them and it has undoubtedly been a great help. This being a large institution, I think we can well afford to continue it, and I would like to make such a motion.

The motion was duly seconded, and it was unanimously voted that the Association appropriate one hundred dollars for a scholarship in the Medical School of Maine, the same to be referred to the Council for approval and final action.

PRESIDENT — We will next listen to the report of the Visitors to the Insane Hospitals.

SECRETARY — Dr. Woodcock is Chairman of that Committee and he will not be here until this afternoon, I have been told.

PRESIDENT — We will hear the reeport of the Delegates to the State Association meetings.

NEW HAMPSHIRE MEETING, 1913.

Dr. Gilbert: —

As delegate from the Maine Medical Association, I attended the annual session of the New Hampshire Medical Association held at Concord.

The program reflected credit to the Committee in charge. The sessions were opened promptly at ten A. M., and two P. M., by the President, and five papers were read each session. The House of Delegates conducted the business matters of the Association during the regular session.

Ample entertainment was arranged for the ladies during the two days, and a lady member served on the entertainment committee.

A Dutch lunch was given the members on the evening of the first day, by the Concord Medical Club, while the annual banquet and President's reception was held on the second day. In the receiving line were the officials of the Association, the Governor of New Hampshire, and visiting delegates.

Following the reception came the banquet. It has been customary for some years to have the ladies attend the annual banquet, which proves to be a most interesting occasion for all present.

In some ways, this body and the New Hampshire Association could work together to their mutual advantage. For instance, the publishing of a North-eastern Medical Journal in the place of our Journal, would not only give New

Hampshire a publication, but would prove advantageous to Maine, in that it would widen our circulation, and make it more desirable for advertisements, as well as giving us second class mail rates. It would be possible to run a larger Journal, or a bi-monthly. This might be left in the hands of a Committee to confer with a similar committee of the New Hampshire Association, and even to include the Vermont Medical Association if deemed advisable. The joint membership of the three States would amount to about fifteen hundred men, and with such a number and territory to draw from, we could offer a very desirable publication together with greater security in carrying out our plans toward strengthening the organizations.

PRESIDENT — You have heard the doctor's report. What will you do with it?

DR. GILBERT — It seems to me that a Committee of three might be appointed by this body to confer with the New Hampshire and Vermont Medical Associations to ascertain whether the three States could join in the publication of a Northeastern Medical Journal.

PRESIDENT — Should that Committee be appointed by the House of Delegates or by the Council?

DR. GILBERT — I think it would be better coming from the House of Delegates, because the House of Delegates is more in touch with the matter, and so far as the joint action is concerned it would have to be decided in the House of Delegates.

PRESIDENT — Then should this Committee not confer with the Council?

DR. GILBERT — I think it would be well to do so and determine whether it is advisable to make such a move.

PRESIDENT — Will you make that as a motion?

DR. GILBERT — "I move that a committee of three be appointed by the House of Delegates to confer with a similar Committee to be appointed by the New Hampshire and Vermont Medical Associations for the purpose of considering the matter of the consolidation of this Journal with the transactions and Journal of above States with the idea of making it a joint publication, working out some of the problems that our Society is too small to work out individually." What we want is the power to see if these other States would consider this plan. They might not be willing to do so. I have taken it up in a small way with some of the New Hampshire men, during my visit there, and I found that some of them were enthusiastic about it and some of them were quite indifferent. Of course, nothing definite could be done until they have their meeting in May. A Committee can be appointed here to report at our next annual meeting, and in the meantime, we could ascertain what could be done.

PRESIDENT — You have heard the report of your delegate to the New Hampshire Medical Societies. What shall we do with it?

It was moved and seconded that the report be accepted and the recommendations adopted.

DR. HARDY — How is that Committee to be appointed?

DR. GILBERT — I move that it be appointed by the chair.

PRESIDENT — I will appoint as that Committee, Dr. F. H. Jordan, Dr. G. B. Sylvester and Dr. F. Y. Gilbert.

It is now time to open the regular session and I will say, gentlemen, that I wish you would be here promptly at one o'clock this afternoon. We have a great deal of business to get through before the afternoon session opens, and we will open promptly at one o'clock, if you will come in. A motion for adjournment is now in order.

It was voted to adjourn until one o'clock, P. M.

Adjourned.

W. BEAN MOULTON,
Secretary.

WEDNESDAY AFTERNOON.

Council Chamber, City Hall.
July 2nd, 1913.

The meeting was called to order at one o'clock, President Marsh in the Chair.

PRESIDENT — Dr. Williams, are you ready to report for the Committee on Visitors to the Insane Asylum?

Mr. President and Members of the House of Delegates: —

Your Committee beg leave to report that they have visited both the Augusta and Bangor State Hospitals and spent a most agreeable and instructive day at each place.

An act of the last legislature changed the names of these institutions from Insane Hospitals to State Hospitals. This, we think, is most commendable, as the former name conveyed a disagreeable impression to the patients and their friends.

At the Augusta hospital, no improvements have been made in the buildings during the past year, although there are two wings on the male and one on the female side which are old and lacking in modern conveniences, and compare most unfavorably with the sanitary and hygienic condition of the remainder of the hospital. It is hoped that an appropriation will be made by the next legislature of a sufficient amount to completely renovate these buildings, or replace them with new ones, as there are seventy or eighty men sleeping in one room.

There are at present over nine hundred patients in this hospital, and we found that about sixty per cent of these were employed in some capacity in or about the buildings. It is now recognized as no small part in the treatment of these cases that the patient be given as much agreeable occupation for mind and body, as is consistent with his condition.

A large part of the farm work is performed by the men, and many of the women are busy in all departments in doors, and it is worthy of mention here that all brooms used about the buildings, and all the hose worn by the inmates, as well as many other articles of clothing, are made by the patients themselves.

Great advancement has been made in the past few years in the treatment of those who are mentally afflicted. Insane hospitals are no longer mere places for the custody of the inmates, but for the cure of insanity, and a remarkable feature in this connection is the almost complete elimination of restraint, the utmost freedom consistent with safety being accorded to the patients.

The hospital at Bangor is a thoroughly modern and well equipped institution, with most convenient and sanitary accommodations for its five hundred and fifty inmates. Excavations are now being made for a store-house and cold-storage plant, which will include an ice-making machine. Repairs on buildings C and E are to be made during the coming year, and a fire main is soon to be laid through the grounds to the rear of the buildings where three hydrants will be located in such a manner as to afford protection to all the hospital buildings.

The patients here are treated along the same lines as those in the hospital at Augusta, and restraint is almost entirely eliminated. They are also employed, as far as possible, in all departments of the hospital, not only with marked benefit to themselves, but with advantage to the institution. Broom-making, rug-weaving, shoe-repairing and other similar occupations are practiced here also, with good results and new industries are added from time to time as opportunity arises.

A tuberculosis pavilion is maintained in connection with this hospital, which cares for that unfortunate class of patients from both institutions, who are suffering from a double affliction, and while not much can be hoped for in the way of recovery under these circumstances, their segregation prevents the infection of others.

At each place visited we were fortunate in being able to attend a medical conference. These meetings are held three times a week, and all recent cases, as well as those cases in which trial-visit, or discharge is contemplated, are then brought before the staff, the history of the patient reviewed, the diagnosis, prognosis and method of treatment discussed; and we were greatly impressed with the manner in which these were conducted, and the minute and searching examination to which each case was subjected.

It might be well here to remark that your committee believe that this association should continue to urge the enactment of a voluntary admission and emergency commitment act, such as are now in successful operation in other States. It frequently happens that cases on the border line between sanity and insanity, realizing their condition, seek admission to these hospitals as voluntary patients, but under the present law it is not possible to admit such cases for treatment.

Both hospitals have well equipped pathological laboratories and the excellent work being done by them is of great service in the treatment of patients.

Autopsies are performed whenever possible and the results are of inestimable value in explaining various physical and mental symptoms met with in the course of the work.

Your Committee found the general condition of the inmates of these institutions to be exceedingly good. The wards are clean and well kept, and the nurses pains-taking and efficient. Intelligent and conscientious work is being done by both Superintendents and their capable assistants, and the medical departments of these hospitals will compare favorably with those of any similar institution.

In regard to the recent controversy at the Augusta hospital, we wish to say that in our opinion, Dr. Miller's administrative work is deserving of the endorsement of the medical profession, and that it should not be hampered by any politician or politics. It would be most unfortunate to lose the services of so valuable a man, or turn the medical supervision of a State hospital over to any man, rather than a medical man of acknowledged ability in this line.

Respectfully submitted,

(Signed) ADELBERT F. WILLIAMS,
GALEN M. WOODCOCK.

PRESIDENT — Gentlemen, you have heard the report of the Committee on Visitors to the Insane Hospitals. What will you do with it?

It was unanimously voted that the report be accepted and turned over to the Committee on Publication.

PRESIDENT — The next to come before us is the report of the Delegate to the National Council on Medical Education. Is Dr. Gerish in the house? (He was absent and no report was made.)

PRESIDENT — Can we have the report of the Delegate to the National Legislative Council, Dr. Gordon of Portland?

(Dr. Gordon was absent and had sent no report.)

PRESIDENT — Can we have the report of the Committee on Public Policy and Legislation, Dr. Robinson of Bangor?

(Dr. Robinson was absent and no report was made.)

SECRETARY — I find here that we have yet taken no official action upon the death of one of our members, Dr. Ambrose H. Weeks of Portland, who has died just recently, and it seems to me to be fitting that the Society should pass some resolutions on his death. He was very popular with the members of this Society, very much liked by all who knew him, and he came to rather an untimely end from typhoid fever.

DR. WILLIAMS — I would make a motion that the Chair appoint a Committee on Resolutions.

Dr. Williams' motion was unanimously carried.

PRESIDENT — I will appoint as Committee on Resolutions on the death of Dr. Weeks, Dr. Addison S. Thayer and Dr. F. P. Webster, both of Portland.

I think now we may pass on to the appointment of the Committee on Election of Officers. Usually I think the House of Delegates has appointed that Committee, and shall they be appointed from the floor, or what is your pleasure regarding that Committee?

DR. BEACH — I move the Committee on the Election of Officers be appointed by the Chair.

Dr. Beach's motion was unanimously carried, and the President appointed as Committee on Election of Officers, Dr. T. E. Hardy of North Vassalboro; Dr. J. M. O'Connor of Biddeford, and Dr. T. S. Dickison of Houlton.

PRESIDENT — The time has arrived when we must adjourn for the regular session, and I would ask you all to meet here as promptly as possible tomorrow morning at nine o'clock.

DR. GILBERT — Mr. President: It seems to me that, inasmuch as there are some matters which are to be introduced later on, it might be well if we were to continue this meeting at three o'clock with the Vice President in the chair. We might continue to thresh out a good many of the matters that are to come before us, and I would make a motion to the effect.

PRESIDENT — It has been moved and seconded that there be a meeting of the House of Delegates at three o'clock. If that is your mind, please manifest it. (It was unanimously voted to hold a meeting of the House of Delegates at three o'clock.)

PRESIDENT — A motion to adjourn is now in order.

It was unanimously voted to adjourn.

Adjourned.

W. BEAN MOULTON,
Secretary.

WEDNESDAY AFTERNOON, 3 O'CLOCK.

July 2nd, 1913.

The meeting was called to order with Vice President Hardy in the Chair.

DR. HARDY — This meeting was called, as I understand it, to give the members from York County an opportunity to bring some matters before this body in which they are specially interested. I understand that one of these matters is the subject of contract practice.

DR. MCCORRISON — Mr. President: I understood that Dr. O'Connor was to be present and bring this matter up. I was a delegate with him at our previous meeting, and I understood that he was to take the matter up here before you. Personally, I don't know much about the subject, but it is evident that the York County physicians are quite interested in the matter and wish it discussed here today. That is as far as I know about it at present. I have some idea as to what they mean by a contract physician, but I do not know as I understand just what is always meant when this term is used, and I think it should be brought up here in such a way that we can fully understand just who or what is meant by the term contract practice or contract physician. Now I am going to ask you first of all just what do you mean by contract physician or contract practice?

DR. HARDY — At our meeting there was some discussion regarding contract practice and physicians who practice along that line. As I recall it, it was taken up at a general business meeting and discussed pretty thoroughly, and I think while there was no definite action taken at that time, it seemed to be the consensus of opinion that this was a matter to be handled by the County Societies rather than by this Association. I think that was the general opinion at the meeting a year ago, if I understood correctly. However, I am sure we would be glad to hear from any member of this House of Delegates this afternoon, and get their definite opinions if it is possible. We can talk this over as freely as we like and see if we can arrive at any profitable conclusion.

DR. F. E. SMALL OF BIDEFORD — Mr. President and Members of the House of Delegates: I was asked to substitute for Dr. O'Connor at this meeting, as he was unexpectedly called home. We have a situation or condition of circumstances out in York County that is far from pleasing, and I for one, and I think the other members of the Society as well, want to ascertain what can be done, if anything, to correct the present conditions — the conditions which have been in existence there for the last six or eight years at least. We have there an order called the Eagles, which was claimed to be a social club, and I guess at one time it was quite social. It is also supposed to be a beneficial order insofar as they have a lodge physician who receives his pay by the year. I understand he received two dollars a year from each member for treating his whole family, or for treating him, if he had no family. But no matter how large a family the member of this order might have, the price was the same, two dollars a year. There have been two or three men who have done this work in the past — in fact, the man who has done this work is, at present, President of the York County Society. This matter was brought up at the

summer meeting last Friday, and he claimed that he was not doing contract practice, which is true perhaps, but, whether it is true or false, the fact of the matter is that he was beaten out by Dr. Larochelle, who is another member of our Society, and who is abroad at the present time. Dr. Willard is doing his work for him for the Eagles and claims that he does not know what his recompense will be but expects that it will be at the regular rates. He admits that he did this contract work several years ago, and this we all know. There is also a new Lodge of Moose starting in Biddeford, having a large membership. Their charter has not yet been obtained but last Friday morning I went to see a man who is a member of this new order, and whom I have treated in the past. I asked him what about this Order of Moose, and he said, "Well, I tell you that is going to be a great thing and you want to get into the game if you want part of it. It means a good income for you, and there will probably be but two members chosen from this city, and there are already four other applicants." I asked him who the applicants were and he handed me an application blank upon the back of which four members of the Saco and Biddeford medical profession had had their names printed, and now while some of the members of the order tell me these men are candidates for the position of lodge physician, they claim that they are not. They claim they are members but that they are only acting as examiners for the Lodge, as each man must be examined to see if he is eligible before he is allowed to join the order. The general opinion among the leading physicians, and I think all my brother physicians will vouch for what I say, is that this order is using the names of these men to help get members into the order, telling the people as they solicit them as members that they can call either one of these men, any one of the four as they choose, and all it will cost them will be two dollars a year. They are supposed to be good men, all of them, and why they should be willing to be mixed up in a mess of this kind is more than some of us can understand. I cannot, of course, prove to you that these men are applicants for the position I have described, but one of the lodge men, and one whom I might call a leader of the order, told me they were, and that "I had better get a move on if I cared to get any of the business."

I understand that the same lodge is opening a Chapter in Sanford, so Dr. O'Connor told me only a short time ago, and they have two men who are applicants for the position there. It seems to the members of the York County Society that something should be done to prevent this kind of practice, and we want to know what can be done to regulate this matter and straighten it out. If it is up to us to expel these members why I suppose we must do so, but we had rather reform

them and keep them in the Society if that is possible. In a city like Biddeford, I will mention Biddeford because it is a sort of miscellaneous city, made up of all classes of people, the majority of the men want to get what they can get the cheapest, and if a man can have his wife and six or eight children treated for two dollars a year, he is going to do it, and these orders are taking in pretty good classes of people as their members, too. If Dr. McCarrison — he is another delegate from our Society — has anything to say on this subject, I would be glad to hear from him. Dr. O'Connor asked me to speak of this matter for him as he could not be here this afternoon. I have the application blank right here with the names of the five physicians stamped on the back, and will hand them to Dr. Hardy if he wishes to see them.

DR. HARDY — You may read the names, if you please, doctor.

DR. SMALL — "Dr. G. C. Precourt, Dr. D. E. Dolloff, Dr. R. L. Maybury, Dr. L. E. Willard, and Dr. H. L. Prescott of Kennebunkport; Dr. Maybury and Dr. Willard are of Saco, and the other two of Biddeford.

DR. MCCARRISON — We do not seem to get a description of just what we mean by contract physician. What properly constitutes a contract physician? The city physician is a contract physician, any company who employs a physician for its work is employing a contract physician, and so on, touching any institution which may employ one man to attend to all its work. All these would come under the head of a contract physician, but the question is here, what is a contract physician under the terms of this discussion? What is the ethical contract physician and where does the ethics come in? Nearly all of the fraternal bodies employ a physician who works for a fee of one dollar and we have got to be satisfied with that, or if the fee is two dollars a year we have got to take that and be satisfied with it, and I must confess I have taken this two dollar fee myself.

Now I know what Dr. Small has said is correct. It does not affect me very much where I am, but the question is, is it ethical for a physician to take a position as a contract physician, where there may be a membership of two or three hundred, and so will net him say six hundred dollars? His brother practitioner near at hand, it may be, is left out in the cold. He is called in many times for the purpose of seeing whether or not the lodge doctor is doing right. Now what about this consulting physician? Is it ethical to get his advice, to have him come in on consultation, and the other one be running along on the six hundred dollars, doing the work of a family which numbers anywhere from two to ten? Is that justice?

I don't see any objections to contract physicians, like government, town or city. But these lodges are growing all the time and therefore it seems to me unfair for any of our regular medical men to be conducting himself in such a way. If that thing could be applied to the ordinary young physician who is starting in life and trying to build up a business and work up into a place for himself among the older physicians, that might be all right. But when it comes to a man who is capable of earning a large income and who is receiving a large income, and I find they are just as ready to get that six or eight hundred dollars — that is the thing that makes it look absurd and ridiculous to me. It is an actual fact that there are men in the profession, men who have very large incomes, who will accept those positions. It seems to me that that is the side of the question that needs investigating, and that this Society should look into it and see just where we stand — what is ethical here and what is non-ethical as a part of contract practice.

DR. CUMMINGS — I think some action will have to be taken by the State Association in regard to contract work. I don't think the County Societies will do any better than the Androscoggin County Society has done. A year ago in April, the members of that Society present voted that no member of the Androscoggin Society should do any contract work of any kind unless they got the full and prescribed fee in return for their services. This April when the time came for that vote to go into effect, a meeting was called, and the matter was pretty thoroughly discussed and talked over pro and con, and it was agreed that it would do no good to have anything like that in effect unless the spirit of the vote was carried out and every member of the Society should sign an agreement and so have his name appear in black and white on that agreement. As the discussion went on there were about forty motions before the house at one time — motions to adjourn, to lay the matter on the table, to amend it, and everything that could be thought of, and the amount of the story is, that the matter was placed upon the table and that was as far as we got. Here we are in Androscoggin County with a motion to have no contract work done or carried on, and still quite a good many of our members are doing contract work with the Eagles, Moose and perhaps half a dozen other orders. There are three Jewish orders there and I could not say just how many others, but I would be one to stick to it and do no contract work if all the members of our Society would agree to that, but there is nothing to be gained if as soon as I throw up the work, some other member of the Society is simply waiting to take it up. I do no contract work at the present time and I have been against it for some time as I believe it would be better if no man would do this work in this way,

but would do the work for what it is worth just as we do our other work.

I believe that the State Association is really the point where this work should begin. The County Societies are just a part of this Association, and certainly it seems to me that the time has arrived when something has got to be done in the Association in regard to the condition which now exists and which is growing really serious. Every year new orders start up in the different towns and cities. It hurts a great deal more in the small places to be sure, than it does here. There are lots of people who can pay two dollars a year and practically get their doctor for nothing unless the case is really serious and then they want their old family physician to come in consultation, and I think some definite action should be taken—that this matter should be threshed out at this time and definite lines drawn, and that we should hold all of the members of the Maine Medical Association to them. If any of the members do not live up to their agreement, some action should be taken to adjust the matter properly. He should be turned out of the State Association and that would throw him out of the County Association as well.

I think that would work out the same as the Life Insurance business in Androscoggin County. We agreed to do no life insurance business for less than five dollars for the old line companies and the others for three dollars, but this did not work out as satisfactorily as we had hoped, since there are always those who will not keep to any agreement. We ought to thresh this thing out here and then stick to what we know to be right.

DR. MCCORRISON — It seems to me that it is foolish to begin this thing unless we are prepared to see it through to a finish because agreements are sure to be broken unless they have a penalty attached, and a penalty, too, which is effectual in its workings. If these matters are viewed with suspicion by our best men, and if the State Association interests itself in it, it will stop that kind of business. I don't believe there is any good reason why a body of men should organize themselves into a lodge or under a lodge name, in a way to get professional services for a less price than they could otherwise do, and determine for the medical man the amount he shall receive for his fees. This is not ethical nor practical from my standpoint, and they have no right to do anything of this kind, but that is practically what they are attempting to do in these instances. They feel that they have the medical fraternity more or less at their mercy and they can offer them just about what they please, confident that they will accept it. It is time for us to do something and it seems to me that here is the place to do it. This is perhaps my maiden speech, but I am interested in this

matter. I know how it works in my little town, and I know that a great many feel as I do about it, and a great many of the men who are doing the lodge work, do not like it. They would much rather have the regular work, but they have got started in this lodge business and they cannot quite see their way perhaps to get out of it — they think if they drop it some other physician will pick it up and so they go on. I think the time has arrived when this body should take the matter up and see what they can do about it. It seems to me that this is the place to right the wrong and get the matter adjusted as it should be. We can talk it over here and get the ideas of these men, and then go back to our County Societies with more confidence. They will listen to the advice we bring them from this Association.

DR. CAMPBELL — Last year, I had a great deal of interest in this subject, but when I went into the Association and spoke against contract practice, I did not get much of a following. It does not seem quite the proper thing for men to be practicing for less than the fee agreed upon in the town in which they live, in one kind of work and not in another, but when men like those who spoke in favor of contract practice last year, men for whom we all have a great deal of respect, we cannot expect much from the men in our smaller towns who do not go as deeply into these matters. It was then suggested, I think, that this matter be laid on the table because some men who were members of our State Association wanted to do this kind of work and these physicians who spoke in favor of the contract practice, thought it would be an injury to the younger men if they were prevented from doing it.

It seems to me that these matters lie with the physicians and that it does not rest with the lodges. The lodges are not to blame if they can get their medical work done for two dollars. If we can get this Association to take a stand upon the matter, then it would be an easier thing to take it up with the local man, but unless this great body of the Maine Medical Association stands behind the County Societies, it is going to be a very difficult matter for the County Societies to make the initiative.

DR. SYLVESTER — I cannot help thinking we lose a lot of time in this matter because we do not know just what we want, we mix up a lot of stuff with contract practice work that does not legitimately belong there. We must recognize the right of any man to work either by the month or year at any price he sees fit — we have to do that, and it is only fair that we should. Now that kind of contract practice is not the same as this lodge or fraternal work of which you have been speaking, it is not the same grade of work to which you have

alluded — it is not the kind mentioned by the delegate from Androscoggin County. It seems to me that action of that kind simply declares something is wrong, or declares war against a certain thing without offering any remedy or solution of the difficulty. It seems to me that we are taking exception simply because some physician is doing something that we are not doing in regard to some order, or that this order offers so much and the physician accepts it. Now, if that is all that it is intended to cover, had it not better be stated in that way? The term order has been used so often, that in my mind it appears to be the thing we are striving against rather than all forms of general contract work. Is that correct? If not, it is too bad to confuse ourselves by not knowing just what we are attempting to remedy. Last year, I think, there was some objection to acting on the matter along the ground I have mentioned. I think I remember Dr. Hayes making the remark that he would resign if such action was taken, and his point, it seemed to me, was well taken, and his idea more or less in the matter of the right and wrong kind of contract practice, and I can't help thinking that we talk a good deal about these matters without getting ahead much. We have some good men in the Association who would doubtless drop out if their work was interfered with and they would be right in doing so unless we can have some definite understanding of what we are attempting to cure. Unless we can have something definite to work upon, I think we had better keep still.

DR. GILBERT — It seems to me, Dr. Sylvester, it can be readily understood. The railroad surgeon is a contract man just as the railroad lawyer and is an economic necessity. He ought to be allowed to do his work in his own way, and receives proper compensation for his services. I think we will all agree upon that. I think perhaps we had better drop the term contract practice, and confine the discussion to lodge work and industrial insurance. It seems to me that then we have something definite to go upon.

DR. SYLVESTER — I should go on with the process of elimination. I can hardly see why, from a business point of view, a doctor is not entitled to work under contract if he sees fit, with an order, lodge, or business concern, accepting a contract for his services if he wishes to do so, just as men can do in financial circles, by the month or by the year at a price which is fair and satisfactory to him and then stick to that contract. I can see how any lodge or order might hire a doctor to do its work, and there is a point that we must be careful about, and if we are making a distinction against any of these bodies we are dead wrong. We ought to find out just where the trouble lies and confine ourselves to that point, then perhaps we can get ahead. If the wrong

men get under the same blanket with the good men we must be careful not to class them all together.

DR. LITTLE — Why cannot we name the Moose, Owls, Eagles, Forresters and all such lodges, and then it will leave no question as to what we mean, or what work we wish to prohibit?

DR. DICKISON — It seems to me we are taking up a good deal of time on a matter that is not of as much importance as some of us appear to think. I came down here from Aroostook County and if the talk made here by the other members present is correct, then I think we ought to feel very proud of that county. Some twenty years ago was the first opportunity I had to come up against this question of contract practice. The people in my town wanted a contract physician and put the question up to us, asking that all put in bids for the work, which was the town work, of course. Being the youngest man at the time, I took it upon myself to visit every physician in town, asking them not to put in a bid. I spent all my spare time for quite a while doing this, and, as I had had very little experience, nearly all my time was spare. I saw every man and asked him if he would sign an agreement not to put in a bid for the town work, and then I spent another good bit of time going around with the petition. They all signed it with the exception of one man. All but one agreed not to put in any bid for the work, and the town would not accept the bid of the one man who would not sign the agreement. From that time up to the present, no attempt has ever been made to get a contract physician in the town.

Now so far as belonging to these orders goes, I want to say that I am a man who has belonged to the order of Forresters for over twenty years, but, in spite of that, I have never done any contract work and I want to say that I have never known of any contract work being done in our order. We charge two dollars for making an examination for any fraternal order, and, as far as I know, that is the rule and method throughout the county. We charge two dollars for fraternal organization examination and five dollars for the old lines, that is for the straight life insurance work, and with the industrial insurance work we have very little to do. That is our agreement and it has been broken only three times to my knowledge. Three men did work for the old line insurance companies for less than the price agreed upon, but they got tired of it and were ashamed of having done so. At the present time there is no insurance company that can get any examination made in that county for less than five dollars, with the exception of one man and he will not continue to do it long. Of course, if any man signs an agreement and then breaks it, he is not a gentleman, and I think that would be the easiest way of excluding him from the County

Society. I don't see why that would not be the easiest way of adjusting this matter and perhaps the most expeditious. We do not want to drive away any good man who belongs to our Society on account of any of these things which may turn out to be merely misunderstandings. We don't want to exclude the members simply because they do not think exactly as we do. I think excluding them from the societies would simply take away some of our good men while it would not have any particular effect on this contract work of which you speak. You would simply exclude the members and that would be all there would be to it, as I think the men who are doing this work are not the men who are anxious to remain in the Society, but would choose to keep to the method of working they had chosen, regardless of what the Society might say of it. I think the best way of adjusting the matter is for the Society to get all those men to become members and then leave out the contract work. Eventually we can get them on the plane with the rest of us.

Up in Aroostook County, we have a regular schedule of fees and that schedule is very rarely broken. The question came up of one of our prominent members making calls for a dollar and he said—"I have made calls for a dollar and am still making them. Can't seem to get away from it. I am ashamed of it but I can't seem to help it." Dr. Sawyer was the president of the Society at one time and, in speaking of a man who was making calls for one dollar, said he was very much surprised and ashamed to think he was doing so, thus cheapening the profession, and so forth. The physician replied, "Well, Dr. Sawyer can well be ashamed of it for it was he who taught me to make calls for a dollar and I haven't forgotten the lesson." There was one instance that seemed to me the key-note of the whole situation.

We had a man just across the line who used to come over into our territory and practice medicine, cutting prices a little. One day someone called on another doctor for an examination and when it was completed, the doctor charged him five dollars. "Why," said the man, "Dr. Ring only charges three dollars for doing that work." "Well," the physician replied, "Dr. Ring knows better what his services are worth than any other man."

I think that is usually so and I think it is exactly so in this case. If the other man wants to do, for two dollars a year, the work for which we would charge two dollars a call, I think I should be inclined to let him do it. I think that is about the only principle upon which you can work. If you attempt to bar them out of the Association on any grounds whatever I don't think it will be effectual in the way you wish. You will simply lose a lot of the members who do not care particularly whether they stay in the Association or not, and the work with the fraternal bodies will go on just the same.

DR. WAKEFIELD — I think this is an important matter and that some definite action should be taken at this time looking toward some kind of adjustment. I move you that the President appoint a committee of three to look up the subject of contract practice thoroughly and definitely, to determine what is ethical and what is non-ethical, and make the necessary recommendations at the next annual meeting.

DR. LITTLE — I would like to ask if there was not such a Committee appointed and if it was not directed to make its recommendations at this meeting.

SECRETARY — My recollection is that there was such a Committee and that Dr. Gilbert was Chairman.

DR. GILBERT — The Committee was made up through the County Societies. It was not a Committee appointed by this Association. I would like to hear from Dr. Robinson of Penobscot County as to his views on this matter.

DR. ROBINSON — This matter came up in our County Society several years ago, and all the members signed an agreement not to take contract practice. This was done, as I remember it, at the instigation of one of the members who was doing contract work, and when the time came around according to the agreement, they all dropped the contract work except him. He said at that time that he had made an agreement for a year and at the end of that year he would drop the work as the others had done. At the end of the year, he left town and went to practice elsewhere. All the members then dropped contract work and the lodges found that all the physicians in that immediate vicinity were so against it that they now pay a man his fees as do other people when they call in a physician. When the doctor is called the lodges pay him a certain fee instead of paying him so much a year, the only difference being that there are one or two younger men who have not yet joined the Society who do as they wish about these things, but we feel that they will come in in time. It seems to me that that is the best way to get at it. As I understand it now, the State Association is made up by the delegates and representatives of the County Societies, and I don't see how you can expect favorable movement by the State Association until the County Societies lead the way by their favor. Certainly the whole is stronger than any of its parts, and this Association is made up of the members of the different County Societies. Just as soon as the County Societies vote to arrange these matters in any particular manner, the State Association is bound to follow their lead. You cannot reverse it and have it work out to your satisfaction. The power in this Association comes from the County Societies and it strikes me those are the places where the work

must begin if you would have it effectual. They started this in the Penobscot Society, and when they find that these lodges cannot get the kind of men they want for contract work they will change their tactics and pay for their services as they did in Bangor, or else it will be in the hands of those who don't care whether they are members of the Society or not. If they are getting five or six hundred dollars a year, they will not place that against membership in the County or State Association and we need not expect it. That kind of men won't do it, and it seems to me that when you start with the State Association, that you start the thing wrong end up. But just as soon as you begin to agitate the matter in the County Society meetings and get your agreement signed, you can bring all the County Societies into line. I don't see how you can do it in any other way that will be effectual and that will cure the condition which is now troublesome to many of our members.

DR. LITTLE — May I ask, Dr. Gilbert, what became of the matter when it was brought up by the Cumberland County Society?

DR. GILBERT — A Committee was appointed to call a meeting of all the men in the County doing contract work, with the idea of getting them to come to some agreement as to what they would be willing to do, and to present the matter at the County Society at its next meeting, hoping to solve the problem in a way similar to the way the matter was disposed of in Penobscot County. Dr. John F. Thompson was President of the County Society and the Committee appointed over a year ago has not been called on to report.

DR. F. E. SMALL — I would like to inquire if we must wait a year before anything can be done.

DR. WAKEFIELD — It seems to me that a year would be a short time in which to do the work.

DR. SMALL — I think a year is too long a time to let the matter drag along without anything being accomplished.

DR. HARDY — You can take whatever action you see fit but you will accomplish nothing very satisfactory, in my mind, by trying to force these people to do this thing, because, if they decide to do this work, they will do it anyway you can fix it. It seems to me you would just be driving so many men out of your society. I think probably if you allow them to continue as they are doing or as they want to do, that you will eventually cure them in your own way as this Houlton man has just told us.

DR. GILBERT — Why not let a Committee draft certain resolutions specifying that this work is against the wishes of the Association, mak-

ing some recommendations toward eliminating it and submit such resolutions at the next meeting of the House of Delegates.

DR. WAKEFIELD — That is the spirit of my motion already offered. I do not ask for any definite legislation, but to have a committee look into the matter and make such recommendations as it sees fit and then, if the County Societies wish to adopt them, well and good. There should be something of the kind done so that each County Society would require about the same measures, in other words, some concerted action should be taken so that each of the Societies can do its part in adjusting the matter satisfactorily.

DR. SMALL — I think that would reach the conditions. We want to know how we can get at this matter in the easiest and best way, and by doing the least harm to the Societies. What powers can we use in order to influence these men who are doing this work, to give it up? We want to do whatever we can to get them to give up this business, and at the same time to save our societies as much as possible.

DR. CAMPBELL — There is just one objection I think that might be made to this motion. It puts the whole thing off for another year. It seems to me that it simply undertakes to do the work over again that has been partly done by the Committee, of which Dr. Gilbert was Chairman. It seems to me we should be accomplishing nothing by putting the whole matter off for another year. When this Committee reports and the report is accepted it will leave us just exactly where we are today. It seems to me that a Committee might be appointed to get the facts as fast as possible, facts of which we all appear to be perfectly aware. Six months ought to be ample time in which to make all the necessary preparation. When we have spent another year getting these facts, we are just about where we are today. We have done next to absolutely nothing when we put the matter off for a year while we travel over the same old ground.

It seems to me what Dr. Robinson has said gives us the best means of getting at this matter and, if we could get all our County Societies to take the action which Penobscot has taken, we might eradicate the thing entirely. There are only two men in Augusta who do this kind of work and one of these men told me recently that he would drop it the minute the County Society expressed its disapproval. I think if we could get some one interested to do the kind of work that has been done in Penobscot County, if we could have each of our County Societies pass around papers and ask each physician to sign them, the thing would soon stop itself without our waiting a year and then perhaps accomplishing practically nothing.

DR. LITTLE — We cannot get the man to go around. We need a little motor behind us to push this thing along. It will never go through

unless we get a little more power than we have at the present time. Somebody has got to take hold and push and keep the matter before the men until they see for themselves what is needed.

DR. HARDY — What was Dr. Wakefield's motion?

DR. WAKEFIELD — That a Committee of three be appointed by the Chair to ascertain what would be ethical and what non-ethical and to make the necessary recommendations for medical legislation on the subject.

DR. HARDY — When would you have them report?

DR. WAKEFIELD — At the next annual meeting.

DR. CAMPBELL — What do you mean by medical legislation?

DR. WAKEFIELD — Legislation that the Maine Medical Association can adopt with safety.

DR. CAMPBELL — That can be adopted by this body?

DR. WAKEFIELD — Yes, and can recommend that the County Societies adopt the same.

DR. MCCORRISON — Put this matter off for another year and we are just exactly where we are now. We have gained absolutely nothing.

Dr. Wakefield's motion was carried, with orders that it be reported on the following day.

DR. MCCORRISON — It has seemed to me that all the County Societies were waiting for was a push from the State Society. It ought to furnish that little push and let us know what we can do.

The Chair appointed as that Committee, Doctors Cragin, Little, and Small.

This completed the business before the House of Delegates and it was unanimously voted to adjourn until Thursday morning at nine o'clock, at the same place.

Adjourned.

W. BEAN MOULTON,
Secretary.

Portland, Me., July 3rd, 1913.

THURSDAY MORNING.

The meeting was called to order at nine o'clock, the President in the Chair.

PRESIDENT — Can we have the report of the Councillor from the First District?

Dr. Cochrane of Saco was absent and no report given.

PRESIDENT — Can we have the report of the Councillor from the Second District?

Mr. President and Members of the House of Delegates:—

I herewith present my report as Councillor, for the past year, of the second District.

March 30th, 1913, I visited the Oxford County Society, the meeting being held at Hotel Needham, Mechanic Falls. The paper was by Dr. W. E. Webber of Lewiston, after which dinner was served. The Oxford County Society is very much alive and should be an inspiration to some of the other County Societies. With a membership of about thirty scattered throughout the County, they have averaged about fifteen at their meetings. At this meeting which I attended, held at one of the busiest seasons of the year and with the roads at their worst, and in a pouring rain, I think fourteen members were present, some of them having had to drive miles through the mud and rain.

June 5th, 1913, I visited Franklin County Society in a joint meeting with Somerset. The meeting took the form of an outing at Belgrade Lakes, the ladies being present. The members and ladies arrived about the middle of the forenoon and dinner was served at about one o'clock. Then a delightful sail was taken in launches upon Great Pond, and, returning at about five in the afternoon, we all cranked up our autos and went our various ways after a day very delightfully spent. I think all the County Societies would do well to adopt this idea of making one meeting each year an outing and include the ladies. I have attended most of the meetings of my own County Society, Androscoggin. We have about forty members and usually have a fair attendance at the meetings, but do not have as many as really ought to be present considering the membership that we have in Lewiston and Auburn. We shall try to get out a larger attendance the coming year.

Respectfully submitted,

E. S. CUMMINGS,

Councillor Second District.

PRESIDENT — Gentlemen, you have heard the report of the Councillor from the Second District. What is your mind in regard to it?

It was unanimously voted to accept it and place the same upon the record.

PRESIDENT — Can we have the report of the Councillor from the Sixth District, Dr. Peters?

Mr. President and Members of the House of Delegates:—

I am sorry to admit that I have not visited the Counties of Aroostook and Piscataquis. I had three engagements to visit the Piscataquis Society but was obliged to postpone each time as I was sick in bed, where I was obliged to remain a month. It was a great disappointment to me as I had anticipated going for quite a while. I am told that they have held two very successful meetings and that their Society is in a prosperous condition.

I was unable to visit Aroostook County Society also for the same reason.

They have just had their semi-annual meeting and their secretary informs me that they are in a very flourishing condition.

Penobscot County has increased its membership by ten and was perhaps never more prosperous than at the present time, or more harmonious. We have both outside and local papers at our meetings, the condition of the Society is constantly advancing and growing and I have little doubt that it will eventually include all the members of the profession in the county. There are no unhappy situations in Penobscot County Society at present and everything seems to be moving along in a most satisfactory condition.

Respectfully submitted,

W. C. PETERS,

Councillor Sixth District.

PRESIDENT — You have heard the report of the Councillor of the Sixth District. What will you do with it?

It was unanimously voted that the report be accepted and placed upon the record.

PRESIDENT — Can we have the report of the Councillor of the Third District?

Mr. President and Members of the House of Delegates: —

It is a great pleasure to report the increased interest in the Sagadahoc County Society, and that the custom of having an occasional speaker of note from outside the county has had a very favorable influence upon the membership and attendance, there now being sixteen members.

The membership in Knox County has also increased to twenty-one. Meetings are held each two months, several additional meetings also being held in order that the members might have the privilege of listening to Dr. Frederick Forcheimer, Dr. Fred B. Lund, and Dr. John B. Deaver. The Society is in a prosperous condition.

Respectfully submitted,

G. H. COOMBS,

Councillor Third District.

PRESIDENT — You have heard the report of the Councillor for the Third District. What is your pleasure, gentlemen?

Voted the report be accepted and placed upon the record.

PRESIDENT — There is a little matter of Medical Legislation that I wish to bring before this body. We have extended an invitation to Dr. Cook to be present and assist us in any way he could by suggesting what might be best to be done, and he has condescended to remain over for a little while and discuss the matter with us. I think it best to take the matter up at once so that we need not detain him unnecessarily. I will call upon Dr. Hardy to open the subject.

DR. HARDY — The particular medical legislation in which I am personally interested, is the matter of medical registration. We are all familiar with the spectacle of the representatives of the Maine Med-

ical Association in their work at the State House for the last few years, and the manner in which they have labored to try to stall the osteopathic bill. We think that very largely our work there has been ineffectual, as the Judiciary Committee favorably reported the bill. I had the pleasure of entertaining one of the members at my home, and he said that, under the present Medical Registration law, he saw no other course for the Judiciary Committee to pursue, in reporting that bill.

At the hearing in Augusta, this last winter, several of the men from the different centers of interest were present, and it seemed best to the few of us who were present, that we anticipate any future legislation. Under the present law, no person can come up for examination unless he is a graduate of some creditable medical school. Of course that bars out the osteopaths or any other cult, and they, with justice perhaps on their side, can ask for a special board under those conditions. It seemed best to the few of us who were there to discuss the situation, that perhaps it might be wise to draw a law that would permit anybody to come before the Board for examination, and, provided they satisfied the requirements of the Board, they would be allowed to practice. In that way, we would anticipate the chief cry of the osteopaths.

It was found that, in the matter of treatment, there is so much difference in the methods of the different members of our own Association, that that could very well be disregarded, and, if a candidate goes before the Examining Board and shows sufficient knowledge of physiology, anatomy and so forth, it is perfectly safe to allow him or her to treat the patients as he or she shall see fit without any question in that regard.

Of course it is very important legislation and such a bill should be drawn with a great deal of care. It seemed to the few of us that it would be wise and advisable for the House of Delegates to appropriate a sum of money with which we might hope to carry on the work of defending this bill, and taking care of the legislative log-rolling that will be necessary to commence the matter and then to stay by it and get it into shape. It seems to me it would be wise to have a Committee appointed at this session to prepare the matter for the next session of the Legislature, and I would make a motion to get the matter before the house this morning, that we appoint a Committee to draft a new medical registration law and appropriate such a sum of money as will be necessary to carry it on and take care of the legitimate expenses.

DR. CUMMINGS — Why would it not be a good idea to have the regular Legislative Committee attend to the work? Why is that not a part of the work of that Committee?

DR. HARDY — It seemed to me that where the general Committee of the Association have so many different questions coming up before the Legislature that they are supposed to look after, that in so important a matter as this is, it would be wise to have a special committee to look after it and see that it is properly presented when the time comes.

I think it is unfortunate that every two years we have to get together and plead this matter when, as a matter of fact, it is none of our personal affairs and most of us do not care a rap who practices medicine. Certainly I don't.

DR. MARSHALL — I would like to second Doctor Hardy's motion. I happened to be one of the unfortunates who was at Augusta last winter and it was rather a peculiar condition in which we found ourselves and the situation in general. When we arrived at the State House, there appeared to be no one to take charge of the matter at all and no one to take the lead and see that the matter was presented to the members of the legislative body as it should be. I think a special Committee would be advisable, and I think Dr. Hardy has outlined the feelings of those present in a very satisfactory way. I think we will accomplish much more by having a special committee whose business it shall be to get this matter in proper shape to be handled expeditiously and intelligently.

DR. BEACH — I think Dr. Hardy's suggestion an excellent one. I think such a committee at our State Capitol is really a necessity, and I should like to nominate as Chairman of that Committee, Dr. Hardy, who is Chairman of the County Legislative Committee.

DR. PETERS — While the general discussion of this subject is under way, I would like to say that it seems to me that the only thing to do is to appoint such a committee as Dr. Hardy has suggested. The regular Legislative Committee cannot accomplish much in this line, and really has very little power. It is absolutely foolish for three or four doctors to go down to Augusta and try to manage this matter with very little expenditure. The osteopaths do not attempt it. They employed the best lawyer in the State of Maine, and one of the most polished and best posted men that could possibly have gone before the legislature, a man that every body liked and was willing to listen to. I heard it generally expressed by members of the Legislature "Why, Mr. So and So (meaning this lawyer who represented the osteopaths) is an awfully good fellow. We have simply got to listen to him in this Committee." It isn't any use to go there unless we are represented properly, and we have got to have a good man to help us out. That is the only way in which the thing will ever be accomplished successfully.

PRESIDENT — Before we go any further in the discussion of this matter, we will hear what Dr. Cook has to say on this subject.

DR. COOK — *Mr. President and Members of the House of Delegates:* I would like to say in the beginning, if I may, one word in regard to the matter of my “condescending to stay.” I wish to say that your President has misrepresented me there, for I consider it an honor and a privilege to be here — very different from any such word as “condescend.” I have been greatly interested in your discussion regarding the matter of the registration law. I have had something to do with the matter of the osteopath practitioners in Massachusetts, and I have been speaking on that subject quite constantly for the past several years. A part of this time I was on a Committee similar to your Committee on Public Policy and Legislation, and there was a vigorous effort made to get a separate Board with us. This effort was advanced for several years, and has been tried just the same in other States, of which I will speak later.

We succeeded in defeating this and then they wanted to enlarge the Board of Registration from seven to nine and have two osteopaths on the Board. While the law called for but one Board, it does not allow three members of any one school of medicine or society on that Board, so we had three regulars, two homeopaths and two eclectics. The osteopaths wanted to add two of their number and enlarge the Board accordingly. We finally succeeded in defeating that measure and then we found that we were going to be defeated by the osteopaths unless we could get control, and, incidentally, it has been said that the osteopaths have been opposed so strongly and persistently that in some States they have separate Boards. Just as soon as you have a separate Board of Osteopaths, and they know that they are in a measure by themselves and quite separate, that they can go and do what they please, you have practically lost control of the situation. We must face the facts as they are and not as they used to be or as we wish they were. The osteopaths are here, and while we may not believe in them, we are dealing with a condition and not a theory. They are getting a good deal to do, they are appearing in comparatively large numbers, and sooner or later we are going to have some difficulty to contend with if we try to shut them out entirely. That was solved in Massachusetts by making a change in our law. The law was drafted by Dr. Harvey, who was Secretary of our Board for a good many years. He by the way drew up our Legislative law, and Massachusetts was one of the last States to get a Board of Registration. There was a Board for nearly everything else that you could name or mention, or perhaps think of, before there was a Board of Registration of Physicians — this was one of the last things to be obtained. But Dr.

Harvey was one of our best posted men in the State, he knew what was practical and what was not, how it was best to secure results, and it was Dr. Harvey who drew up the bill which was enacted. I have not a copy of that bill with me as I did not know I was to have this privilege. It stated that all osteopaths who had been in the State four years should be obliged before September first to get a limited registration as osteopaths. I cannot tell you just what the limitations were. You may say that that is letting in the osteopaths and recognizing them. Yes, so it is. It let in about ninety under this limited registration. After that time every person who wished to practice osteopathy must take the regular Board examination, just the same as any one else had to be examined. That seemed fair enough. They must be graduates of certain schools or colleges in good standing, and they must come up before our regular Board. When they had passed the examination, and some of them passed very creditable examinations, better than many of the graduates from some of our best schools, they were registered just the same as any one else who passed the examination. So that, today, we have legislation that allows the examination of the osteopath just like any other candidate, and he is not registered as an osteopath; they take the same examination as any other candidate who wishes to practice medicine, and by this means we secure only the better class of osteopaths. We think this better than to so vigorously oppose them that it might seem like persecution, and so aid them in securing a separate Board. As it is, we are able to control them and to keep them under our supervision practically. We have only the best and most intelligent class of osteopaths registered, and we feel that that is much better for us all than to vigorously oppose them and so perhaps have the new Board to contend with.

We are very fortunate in another thing: There was an osteopath in Springfield who was very thorough, and when he had completed his work along that line, he afterwards took a medical course at Dartmouth, so that now he is a regularly educated physician. He is well posted in pathology and bacteriology, he is a man that thoroughly knows his business, and Dr. Harvey brought it about that, when there was a vacancy on the Board, the Governor appointed this well educated man to the position, and then we had his support to secure this bill. He was appointed on the Board before we got this latter bill which supports the better class of osteopaths. There are those who believe in being well educated and who want to do away with the fakirs just as much as you do. Of course some of them are only financially interested, but no matter what they are we have their support.

Now as I have already said, you may not believe in the methods of the osteopath and you may feel that you ought to oppose them, but

regardless of how the matter looks to you, you have got to face the conditions as they are rather than to argue from a theoretical standpoint. They are here and you can control them better if you get the right kind of a Board than you can if you continue to oppose them until you have driven them to obtaining for themselves a separate Board. We must remember that, while we criticize the methods of the osteopaths, they are criticizing our use of drugs, and perhaps some of our other methods. We tell the osteopaths that they want to be able to recognize when some regular doctor gives the patient an overdose, that they want to know what the outcome of such a case would be, and be able to take care of it.

Now if there is anything else along these lines that I have overlooked, I will be very glad to try to answer any questions. I think perhaps, Mr. President, it would save time if we could get at it in that way. The real situation that you have to meet is, how to best control the conditions as they at present exist. We think it best to keep the matter under control as we are doing at present rather than to oppose the osteopaths to such a point that they will feel we have driven them too far and they start in and get a separate Board.

DR. CUMMINGS — I would like to ask Dr. Cook if, under the Massachusetts Registration Law, they are allowed to use drugs?

DR. COOK — They can do what they please. They are licensed and they are allowed to do just what any one of us would do. We expect them to be able to diagnose their cases, but they can treat the patient just as they see fit.

DR. HARDY — Don't you think such a resolution as I outlined, where we disregard therapeutics, would meet the need? We would simply establish a high standard of medical practice in the State of Maine, and any person, after he has shown his qualifications to make a proper diagnosis, is at liberty to treat the case as he sees fit. They can manipulate the spine, or they can use massage, or they can pray, or they can do whatever they see fit. If that was our law I think it would be practically the same as you have in Massachusetts, and if they saw fit to appoint an osteopath, I don't think they would do any harm.

DR. COOK — That would be letting in any one as they do in Massachusetts. I don't know as the law would let them in if it was carried to the Supreme Court. I don't know as it would in any State. I understand that you people here in Maine require all your applicants to be graduates of some reputable school, do you not?

SECRETARY — It does now.

DR. COOK — For a short time I should think you had better put them all on some equal ground. I don't know whether you can get the support of the better class of osteopaths. You could make up your Board and then work out those details very carefully. I should hate to let down the bars and let anybody come in that wanted to at first.

DR. HARDY — We would only let them come in for examination and, if they passed the examination, it would be all right, otherwise, it would make no difference to them. If a man is qualified to pass the medical examination, why should not he be allowed to come in?

DR. COOK — That is a point we could discuss at length. It is a question whether or not the courts would make that ruling if it was carried to them. When you have protected life and property you are beyond the rights of the individual if you interfere with another. It is a question whether or not the law would decide that they must be graduates of colleges. They might consider that interfering with the rights of the individual, if they were qualified to pass the examination. The courts might decide that it did not matter where they got the education, if they were qualified to pass the examination, and they might not sustain you farther than that.

DR. BEACH — I would like to ask what proportion of the osteopaths get through this examination creditably?

DR. COOK — I think of a class of eleven or twelve osteopaths which came up for examination in Massachusetts, all but one passed the examination. But, going back a little ways, eighty-five to eighty-nine per cent of them failed. Only about eleven to fifteen per cent got through. But I do want to make this one thing very clear to you, I want you to keep this in mind constantly; you can't change the fact that you have the osteopaths with you, and you have got to deal with that fact. It is a condition at present existing and not a theory, and that being true, the question is how can you best control them? We in Massachusetts feel that we are doing better by controlling them in the way we are doing than we would if we opposed them to the point of creating a separate Board. It is not any use to do as has already been done by a prominent physician who said, "I don't want the word osteopath mentioned in my hearing. I think it is a disgrace to a body of educated physicians to be discussing osteopaths. We don't want anything to do with them." We have got them with us, that is all there is to it, and while we may not like to discuss them, the question is how can we best deal with them. I remember California opposed them so successfully that they now have a separate Board and they cannot do anything with them. The osteopaths can do as they see fit and as they are directed by their own laws. We in Massachusetts

are very well satisfied with the control we have, and we feel that we are taking care of the situation very satisfactorily.

PRESIDENT — Has anybody any further questions they would like to ask of Dr. Cook?

DR. HARDY — What is your fee for examination for registration?

DR. COOK — Twenty-five dollars, but they can take two more examinations if they wish.

DR. HARDY — And that fee provides the funds you need?

DR. COOK — Yes, we have a large number of applicants, three or four hundred every year.

DR. HARDY — What is the present fee here in Maine? There has been some objection to it too, I believe.

SECRETARY — Fifteen dollars.

DR. HARDY — The examining Board asked for an increase at this legislature. Some of the medical men objected and expressed it as rather a hardship on these young fellows that come there for the examination right from school and with practically no funds at all, to be required to pay so large a fee.

DR. COOK — You want to give your Board of Registration funds enough so that they can do good work.

DR. HARDY — Ought not the State to provide the funds?

DR. COOK — Yes, but we in Massachusetts are afraid to ask for too large an appropriation. We consolidate as much as we can too, but this year the Board has paid in nearly ten thousand dollars more than it has cost the State. It is discouraging at times to see what we are expected to do in the way of getting along with a small appropriation and how little is accomplished. Nine hundred dollars were paid to counsel last winter in the interest of medical matters and we have very little to show for it which is going to do us any real good.

I suspect a special committee would get your Board of Registration interested in it, and I would certainly suggest this. I suspect you would get a better committee if you had that committee carefully selected. I would be inclined to question if you would get as good a committee if it was appointed by the Chair, as if it were appointed by a committee of three which might be selected to nominate this special committee. If you get the right men on your special committee, I think you are more certain of accomplishing good results than if you leave as important a matter as this to the general committee that has so many other things to look out for during the legislative session. This bill of ours was drawn by the Secretary of the Board of Regis-

tration. This matter is too important to be treated in any but the most careful manner, and your special committee should be nominated with the greatest care. It should be composed of men who would be thoroughly alive to the interests of the Association and capable of protecting its interests.

Now in some States, I remember that it happened in Ohio, a man who was well equipped in his profession, moved out of the State and during his absence they enacted a registration law. When the man got back, he wanted to go on with his work, but the law prevented him from doing so, and the Secretary told me that they could find no way of allowing that man to continue with his practice other than by compelling him to take the full written examination which lasted for three days. This is very unfortunate.

Now with us the law requires that we test the applicant's qualifications to practice medicine, and that is all that is necessary. It gives us the opportunity of testing a man's ability other than by this three days' written examination. Why just think of the misfortune of having a man like Dr. Edsall, who spoke to you yesterday, come into your State desiring to practice medicine. You know his standing, and you know that it would be very unnecessary to subject Dr. Edsall to three days' medical examination before allowing him to pursue his business and practice his profession. When Doctor Edsall came to Boston, he was invited to meet the Board there upon a certain day and the law says that the examination shall be partly oral and partly written. We gave him a couple of questions to which he was requested to write the answers, and there was his written examination, and then we asked him one or two questions orally and there was the other part of the examination. The Board was perfectly satisfied before he began that he was capable of practicing his profession in Massachusetts, and that was the way Dr. Edsall was registered, and that is why I always insist that a law of this kind would best be sufficiently elastic to meet the requirements of the Board under all occasions. The Board needs to be satisfied that each applicant is capable of practicing his profession under the rules and regulations laid out by the State, and that is all that should be required. To require a man like Dr. Edsall to put in three days passing a State examination simply because the law read in that manner, would be absurd and ridiculous, as well as altogether unnecessary. Think of putting Dr. Harvey Cushing through three days of medical examination. You want to be careful about those things in drafting your bill; you want to get the bill broad enough that you can accomplish with it the things that are necessary and the things you desire.

PRESIDENT — We have given so much time to this matter that I shall have to ask Dr. Hardy to preside, as I must go into the general session. I will ask you all to remain here a little longer and carry out such further business as may be necessary.

DR. HARDY — Gentlemen, I don't think it is advisable to give much more time to this matter. It has been moved and seconded that a committee be chosen by the House of Delegates to draft a new Registration bill and properly present it to the next legislature, and that sufficient money be appropriated to take care of the expense necessary for the work.

DR. WILLIAMS — *Mr. President:* The legislature does not meet for two years. Why could not we have this Committee work this thing up and report at the next annual meeting. I would like to make that amendment to the motion.

DR. HARDY — Is that your mind? We will pass it as it is.

It was so voted.

DR. HARDY — There is another matter of business that I don't think has been taken up. That is the matter of the Journal. I would like to hear from Dr. Gilbert in regard to the appropriation for the Journal for the coming year.

DR. PETERS — I have to go into the other room to read a paper and may I say just a word before I go, Mr. President? Sometime this fall, there is to be a meeting in this city, in the interests of the tuberculosis hospital, or for the purpose of formulating a plan in regard to a sanitarium in this State. The matter is very much in the air just at present and no one seems to know what to ask for. They have been asking for one or two hundred thousand dollars. This matter will interest the State Board of Health and the delegation of State veterinarians and all the hospitals. I make it a motion that a committee of two be appointed to represent the State Association at this particular meeting. This body will undoubtedly be asked to agree upon some plan for presenting the matter to the legislature. I move that a committee be appointed by the President to attend this meeting when it is called.

The motion was seconded and the vote was unanimous.

DR. GILBERT — Now in relation to the Journal. A year ago we started a library and the appropriation from the Society for the Journal was raised from eight hundred dollars to eleven hundred dollars. We were given the three hundred dollars of additional funds for the purpose of hiring a stenographer for the Journal, the stenographer to also act as librarian and keep the library open certain hours. We

have tried to carry out that plan but failed because the library does not seem a success. Day after day the librarian would be there in readiness to serve the physicians and no one would appear, and she objects to staying there with nothing to do. It has been impossible to arrive at any plan regarding the library that has been practical and satisfactory. There has seemed to be a lack of interest, but I think the matter can be worked out by making it a sort of circulating library, and by so doing we can drop the appropriation down to nine hundred dollars and let the Journal run along as it has been doing, provided the offices of Secretary and Editor are made one.

I believe the work of the Secretary and Editor of the Journal could be advantageously carried on by one person. I think these are two offices that can very advantageously be made into one. I am not personally an applicant for either office because it will represent an immense amount of work, but I think that change can be made with profit to the Association. The Secretary is now receiving two hundred dollars. By making the same man do the work of Secretary and Editor of the Journal and paying him five hundred, and then allowing the Journal nine hundred, it could run along more advantageously than in the present condition, and the Editor would receive some compensation for his time. During the three years I have had the Journal, I have received no compensation, the only money spent being that used for the purpose of attending the National Editors' meeting for which I put in a bill which has been paid. Now one step further: We send a delegate to the American Medical Association. The first meeting is the Secretaries' and Editors' banquet and there we get in touch with the work outlined and are given the inside track. We have as guests at that meeting the Presidents, the Ex-Presidents of the A. M. A., and members otherwise interested, so that a Secretary-Editor would be in possession of the valuable knowledge concerning the National House and would be on the inside sufficiently to be able to do efficient work for the State Association. At the present time, we send a man for two years' time, and he has no way of getting on the inside of the workings of the Association, or of the House of Delegates. In order to get the most that could possibly be gotten out of a gathering of that kind, he ought to be made a member of that Association for a period of years. I think that Massachusetts' Secretary has been a delegate for twenty years to the national body. Pennsylvania's Secretary and Editor has been a delegate working with the Journal for something like twenty-five years. The best and strongest men in the National House are those who have been delegates over a period of years. They are the men who are formulating the work and who are coming back to us with new ideas and suggestions for the betterment of our State Associations.

We want to send a man to the National Body who is going to be an efficient worker and who will understand the working of that body at all times — a man who is capable of seeing at once when any matters are sprung on the Association that might prove objectionable. You can send a man who will soon formulate a plan before a political body that will block most anything. It is more with those plans in mind that I suggest the consolidation of these offices, for I think the best work for the Society could be done under some plan of that kind. It seems to me that it would really be a step in advance. You would have a man in a short time who would be thoroughly conversant with the working of the thing. I know Dr. Moulton has the ability and I think he would be a good man for the place if he could be convinced that it was wise for him to take the Journal. It is work where we should go carefully and select the right man, one who is interested in the work and willing to continue in it over a period of time. That is what I had in mind in making the suggestion for the consolidation of the two offices, that of Secretary and Editor of the Journal.

DR. HARDY — You have listened to the suggestions of Dr. Gilbert. Has any one anything to say regarding the matter? We want to clean this business up as rapidly as possible.

DR. GILBERT — I would like to hear from Dr. Moulton.

DR. MOULTON — As far as I am concerned personally, I have been Secretary five years and am perfectly willing to resign. I should certainly resign if any idea was entertained of putting the work of Secretary and Editor of the Journal together, and making the one man do the work. I do not agree with Dr. Gilbert upon this point. It seems to me that the amount of work which would be required by this arrangement is altogether too much for one man in addition to his private work, and I should further be inclined to judge that it would take a different type of man for the two offices. I think Dr. Gilbert deserves a great deal of credit for the manner in which he has succeeded in running the Journal of the Society, there are not many who could have done it as well as he has. He deserves a great deal of credit. To make the change would require a great deal of red tape, as the by-laws would have to be changed and there would be other changes necessary. I should not consider it a change for the better at this time.

DR. GILBERT — I think in most of the States where they have a Journal, they have a Secretary-Editor.

DR. HARDY — It does not seem possible to me at this late hour to make any such radical change this year. I think we shall have to consult our Constitution regarding the matter anyway before we could go ahead on anything of this sort. Perhaps for this year we had better

continue under the old method, and a motion for an appropriation to continue the Journal or not is now in order.

DR. MARSHALL — I had it in mind that possibly the matter could be referred to a special committee with power to report at such time as might be thought expedient.

DR. HARDY — Would it not be better to have a special committee to investigate the matter and report at the next meeting?

DR. MARSHALL — That is, as it is thought best by all parties interested, and give them instructions to report at next annual meeting. Is that the idea? Then we require another motion.

DR. HARDY — I should think so.

DR. MARSHALL — I move that the matter of the Journal be referred to a special committee of three to be appointed by the President to investigate the matter of the running of the Journal after the best method for the carrying along of that work, said Committee to report at our next annual meeting.

The motion was unanimously carried.

DR. MARSHALL — What is the present appropriation for the Journal?

DR. GILBERT — Eleven hundred dollars.

DR. MARSHALL — And you want eleven hundred? It seems to me that it is not very practical to appropriate an extra two hundred. I would move that the appropriation of nine hundred dollars be allowed to stand for the purpose named, and that the work for which the extra two hundred has been asked, be discontinued.

DR. GILBERT — It is necessary to have a stenographer, and the Editor cannot take his own money with which to hire one, besides having nothing for his own time.

DR. MARSHALL — I did not understand that and simply wanted to bring it to a head. If Dr. Gilbert will state what is necessary, I will then make a motion.

DR. HARDY — Eleven hundred dollars is the amount needed.

DR. MARSHALL — I move you that eleven hundred dollars be appropriated for the continuation of the Journal the coming year as has been done in the past.

The motion was unanimously carried.

DR. HARDY — We will listen to the report of the Committee on the matter of contract practice, Dr. Cragin.

Mr. President and Members of the House of Delegates:

As Chairman of the Committee on Contract Practice, I beg to submit the following recommendation: That the State Society discountenances the holding of so-called contract practices, such as lodge physician in those lodges or organizations in which work is done at less than regular rates, for the locality for which said lodge or organization is situated. Also included are city or town contracts, state, pauper, or mill contracts.

(Signed) D. B. CRAGIN,
A. H. LITTLE,
J. M. O'CONNOR,

PRESIDENT HARDY — What will you do with the report of this Committee?

Moved that the report be accepted and referred to the general meeting.

DR. DICKISON — I would like to amend that motion by striking out the name "lodges" and writing in "fraternal societies." Otherwise it might meet quite severe opposition on the floor of the house.

DR. HARDY — I think that was incorporated at the general request of the delegates here yesterday afternoon. They asked for some definite designation. Of course, we will entertain your suggestion and see what is thought of the matter.

DR. MCCORRISON — I hardly think that was the intent of that motion. While it meant to hit the so-called fraternal organizations, I don't think it was intended to name them particularly, I do not so understand from the men who are most interested in this matter. I don't want to come here with a club and I don't believe any of us do. We want to attend to this matter in the best way and in the way that will make the most friends for our Association. I don't want to do anything that will make unnecessary trouble.

DR. HARDY — I want to say, gentlemen, that Dr. McCorrison has shown himself to be a very peaceful man.

DR. GILBERT — I think each year we are having new organizations spring up, and it seems to me that this ought to include future possibilities.

DR. HARDY — Has Dr. Dickison's amendment been seconded?

DR. O'CONNOR — I call for the motion as originally submitted.
(Motion read.)

DR. HARDY — Has Dr. Dickison's amendment been seconded?
The amendment was seconded.

DR. CRAGIN — I think in order to hit the people you want to, you will have to put in something after this manner, lodge physicians

in those lodges or organizations where work is done at less than regular rates. I don't see how you can hit it in any other way.

DR. DICKISON — I think the words fraternal societies would cover them all without naming any of them or causing any hard feelings to anybody. I think that would include all those we have and all those that may come up hereafter who would be working for lower fees in this matter.

DR. HARDY — The report has not as yet been considered. I would ask the Committee to reconsider the matter and report again.

We will now listen to the report of the Councillor from the First District, Dr. Cochrane.

Mr. President and Members of the House of Delegates: —

I was not aware until this morning that I was expected to present a report here. I supposed it went to the Councillors when they should have a meeting. Neither did I know that I was expected to present a written report. Had I been aware of this fact, I would gladly have done so, and, if you wish, I will send one in after returning home.

I will say briefly that the affairs of the York County Association have been exceedingly prosperous the past year. We have held meetings quarterly, and, during a part of them, we have arranged to have some physician of note from away meet with us and either present a paper or discuss affairs in general. The last meeting was held last week, and at that meeting we had the largest attendance we have ever had. We have been steadily increasing and have had new members come in from all over the county. I think that our membership has increased by about a dozen members the past year. I am pretty sure of one thing and that is, that the members are interested, for we have pretty nearly all the eligible men in the county in our Society.

I have visited Cumberland County Medical Society several times and found the Society full of push and energy, and very much interested in the county affairs, as is well known, so much so that it is unnecessary for me to make further comment upon it. I have enjoyed these visits exceedingly.

Respectfully submitted,

J. D. COCHRANE,

Councillor First District.

DR. HARDY — You have heard the report of Dr. Cochrane. What will you do with it?

It was unanimously voted to accept the report and spread the same upon the records.

DR. HARDY — We will now listen to the report of the Treasurer, Dr. Gehring.

Dr. Gehring read his report as follows:

TREASURER'S REPORT OF THE MAINE MEDICAL ASSOCIATION.

RECEIPTS.

1912.			
June 2	To cash in treasury,		\$2,772.00
1913.			
June 28	To interest, Mercantile Trust Co.,	38.97	
	“ Fidelity Trust Co.,	24.63	
	“ Portland Savings Bank,	29.52	
	To cash from annual dues,	1,698.00	
			<hr/>
			\$4,563.12

DISBURSEMENTS.

1912.			
June 5	By cash paid S. P. Warren, bill	\$ 22.00	
8	“ E. F. Moore, bill,	6.07	
14	“ Union Safe Deposit & Trunk Co.,	10.00	
17	“ G. R. Campbell, bill,	11.20	
	“ F. H. Jackson, bill,	13.44	
	“ R. H. Marsh, bill,	5.30	
19	“ Stephen Berry, bill,	1.50	
	“ Southworth Printing Co.,	20.75	
	“ St. Louis Button Co.,	12.00	
	“ Jesse Hill, for prayer,	5.00	
21	“ W. Bean Moulton, bills,	216.43	
July 1	“ Southworth Printing Co.,	100.90	
June 14	“ S. P. Warren, bill,	10.00	
July 12	“ Harris & Jackson, bill,	10.90	
	“ F. N. Whittier, bill,	50.00	
	“ Porteous, Mitchell & Co.,	3.00	
19	“ Southworth Printing Co.,	3.00	
Aug. 15	“ N. E. Tel. Co., bill,	1.80	
17	“ Saylor Engraving Co.,	10.00	
Oct. 1	“ Lefavor-Tower Co.,	3.00	
Nov. 9	“ R. W. Wakefield,	10.00	
13	“ L. C. Smith & Bros.,	6.00	
15	“ Maine Medical Journal,	300.00	
29	“ Southworth Printing Co.,	11.85	
30	“ Elinor S. Moody,	66.80	
Dec. 3	“ N. E. Tel. & Tel. Co.,	1.20	
	“ R. H. Marsh,	15.50	
1913.			
Jan. 24	“ Dow & Pinkham,	14.40	
Feb. 3	“ J. M. O'Connor,	5.00	
Mar. 20	“ Southworth Printing Co.,	3.75	
22	“ Maine Medical Journal,	400.00	
May 8	“ American Medical Association,	3.00	
12	“ Bastian Bros. Co.,	13.00	
15	“ R. H. Marsh, bills,	40.93	
24	“ W. U. Tel. Co., bill,	2.10	
27	“ Southworth Printing Co.,	21.00	
29	“ Maine Medical Journal,	400.00	
June 28	Balance in treasury,	2,732.30	
			<hr/>
			\$4,563.12

REPORT OF THE JOURNAL OF THE MAINE MEDICAL ASSOCIATION.

RECEIPTS.

To cash in treasury, June, 1912,	\$ 388.55
“ from Maine Medical Association,	1,100.00
“ received from ads.,	645.02
“ from Maine Advertising Co.,	9.59
“ from R. L. Polk & Co.,	2.00
“ for Journals,	5.00
“ from Dr. Gilbert,	53.33
	<hr/>
	\$2,203.49

DISBURSEMENTS.

To E. F. Moore,	\$628.65
“ Southworth Printing Co.,	31.00
“ Marks Printing House,	861.68
“ American Medical Association,	6.00
“ F. Y. Gilbert,	54.75
“ C. O. Barrows & Co.,	1.00
“ Ernest E. Noble,	8.00
“ W. W. Roberts Co.,	3.85
“ Marcia Libby,	17.00
Balance in treasury,	591.56
	<hr/>
	\$2,203.49

Respectfully submitted,

E. W. GEHRING.

DR. HARDY — You have heard the report of your Treasurer. What is your pleasure in regard to it?

It was unanimously voted that the report be referred to the Council for auditing.

The Committee on Contract Practice read its report.

DR. CRAGIN — Mr. President, I merely wish to say that before presenting this resolution, I presented the original draft to Dr. Dickson, who, barring the literary style of the latter part of it, accepted it.

It was moved and seconded that the report be accepted and referred to the general session.

DR. MCCORRISON — I am entirely disinterested in this matter personally as it does not affect me in any way, shape or manner, but certain parties who are present said to me that they wanted something done and something particularly specified or definitely recommended. Do I interpret this correctly as meaning that the Association does nothing but simply to discountenance this practice, whatever that means? If that is satisfactory to the gentlemen interested, of course I have nothing to say, but I wish to call attention to the matter as being

somewhat different than what has been talked about. These reports, as returned by the Committee, seem entirely of another color. I scratched out a few notes which indicate the wishes of the different parties who were present. I may ask for my own satisfaction, as a matter of general information, if nothing is to be done except for the Association to say that they don't like such conditions.

DR. CRAGIN — The idea was to define contract practice, and that is why we were so specific in naming these orders. The matter was shown to a member of the York County Society when it was completed, and he expressed his satisfaction with what had been suggested. It is, as I understand, merely to furnish an incentive for the County Society to work upon. They feel that they have the benefit of the State Association's approval. If they cannot straighten the matter out now with this little push from this Association, it will come up again before the State Association next year. The draft of the resolutions as originally made was satisfactory to the York County men, I understood.

DR. HARDY — As I understand my peaceful friend from York County, the York County people wanted the sanction of the State Association to help them in straightening the matter out in their County Society satisfactorily.

DR. JORDAN — I think the motion is sufficient for certain reasons. I am a member of the Supreme Lodge, one of the largest orders in the world, which does this work, and I assure you it has caused more dissatisfaction and more trouble has been raised from this kind of practice than from any one thing I know about. Probably at the next session of the Supreme Lodge, this matter will be rooted out for good, so I think if we have a little patience, these matters will adjust themselves to our satisfaction by dying a natural death. You have no idea of the complaints that are coming before the Supreme Lodge regarding these very matters. The members are not satisfied and they are not willing to have these matters cared for in the way it has been done in the past. It is only a matter of time when these customs will die of themselves for the want of something to keep them alive. I think the more moderately we push the matter the better will be the results.

PRESIDENT — It has been moved and seconded that the report of this Committee be accepted and referred to the general session. Is that your pleasure?

The vote was unanimous.

DR. MCCORRISON — Now that this matter is adjusted, I would like to bring up another matter that has been annoying some of us more or less. If a great many kinds of people are wanting to do a certain thing, they seem to be able to get all their friends to help them.

If the Catholics are building a house, they seem to get plenty of assistance; if the clergyman goes on a trip, his society and friends are expected to supply the cash, and to most of these the doctor is expected to contribute his fees, and to do all other kinds of charitable work. Now I think that this body should sit down on this whole business in regard to charity. There is too much of it altogether, and the doctor is expected to donate more than his part. I have gotten pretty tired of the whole thing.

DR. HARDY — *Gentlemen*: Dr. Hart, as one of the Committee, has a report to make on their visit to the Medical School of Maine. Dr. Hart has to catch a train, and so it has been suggested that his report be accepted by title, and placed on the records. Is that your pleasure?

On motion, it was unanimously voted to accept Dr. Hart's report by title and allow the same to appear in the records.

Mr. President and Gentlemen of the Maine Medical School: —

In presenting our report we wish to acknowledge our indebtedness to Drs. Thayer and Whittier, Dean and Assistant Dean of the School, for many favors received and especially for information concerning the school.

More than ever, the Maine Medical School is a part of Bowdoin College, its finances being under the direct control of the College authorities. As an additional link in binding the two together, the books that constitute its Medical Library, which until recently were scattered about, have been collected and are now to be found in one of the rooms of Hubbard Hall. The economic value of this arrangement is readily understood when we see how much easier it is for the students to have access to them.

The teaching force now consists of twenty professors, thirty-eight male and one female instructor. There have been elected recently as professors for three years, the following, viz.: Henry D. Evans, Professor of Public Hygiene; Dr. Henry W. Miller, Professor of Mental Diseases; and Dr. Henry W. Swift, Professor of Neurology. We are informed that Dr. Carl W. Stevens, who has served very efficiently as instructor in anatomy, physiology, and pathology, has resigned.

This school is now one of the twenty-four medical schools in the United States requiring of its students, as a minimum for entrance, one year of college work, in addition to a four years' high school course. That the total number of students the past year has been only seventy-three, as compared with eighty-three the year before, may be in part due to this higher educational requirement for admission.

In spite of the difficulties imposed upon the school by the requirements of the Board of Education of New York in the matter of full time teachers, all of these requirements have been met, so that graduates of this school are admitted to registration in that State.

The Dispensary in Portland, which was in the process of construction last year, was completed in time to be of use during the past school year. This furnishes to the junior and senior classes an opportunity for clinical study they have never before enjoyed. Especially has it enlarged their opportunity for the study of infant feeding and of tuberculosis.

Each year demonstrates the wisdom of having the third and fourth year students in Portland where they can have the advantages furnished, not only by the Dispensary, but also by the various public and private hospitals. In addition to this is the arrangement with the Boston Lying-In Hospital, by which each student is enabled to conduct ten or more cases of child birth. With a smaller number of students and with a larger number of instructors, there must be an increasing disproportion between receipts and expenditures.

From statistics that have been prepared for the annual report for the Board of Education at Washington, we learn there was received from students, for tuition and other educational services, eight thousand, two hundred forty-seven dollars and nine cents. Income from endowment or production funds seven thousand, eight hundred forty-three dollars and twenty-four cents, making a total income of sixteen thousand ninety dollars and thirty-three cents. Although this amount exceeds that of last year by about nine hundred dollars, there is a deficit. This financial difficulty we hope will soon be overcome by having the endowment fund increased.

In the recent report of the Council on Medical Education, given after its third inspection of the Medical Colleges of the United States, we find the Medical School of Maine in Class A. Though there are a few medical schools much larger, more heavily endowed and more fully equipped, having the rank A1, nevertheless, for this school to attain and to maintain this standard, speaks in the most complimentary terms of the efficiency and zeal of its officers and board of instructors. It is with great pleasure we find that, in the rapid progress of medical science, the Maine Medical school is well to the front.

Respectfully submitted,

W. E. SINCOCK.

W. F. HART.

DR. HARDY — The next matter to come before the House is that of fixing the time and place of the next annual meeting.

SECRETARY — I would offer a motion that that be left to the Board of Councillors.

The motion was seconded and unanimously carried.

SECRETARY — A motion was made yesterday to amend the By-Laws so that the House of Delegates should meet at eight p. m. the day preceding the opening of the annual meeting of the Association. I think that motion was laid on the table yesterday to be brought up today.

DR. HARDY — I should think it might be well to have it taken from the table and disposed of.

DR. MOULTON — I will explain that yesterday it was voted, that Section 2 of Chapter IV of the By-Laws be amended so as to fix the date of the first meeting of the House of Delegates at eight o'clock in the evening of the day preceding the opening of the sessions of the general Association. The idea being, that, in three or four hours of the evening preceding the opening of the regular meeting, we could dispose of an immense amount of work and not be compelled to carry

on this business as we do at the present time. The matter was discussed somewhat yesterday and finally laid on the table. It is now open again for discussion if anyone wishes to make any suggestions.

DR. LITTLE — I have had some experience in calling meetings at an early hour in the morning. You call a meeting before most of the trains get in — which is somewhere around one o'clock, and a good many of the delegates will not have arrived. I should think it might be better to have it at nine o'clock and that would give them time to get up from the station. A great many of the delegates would have to leave home a day earlier for the sake of being here at the opening meeting of the House of Delegates, and I have not found the Secretaries of the other sections greatly in favor of it.

DR. HARDY — Any one else anything to say regarding this matter? If not, we are ready to vote on it. The motion before the House of Delegates is, that section 2 of chapter IV be amended so as to allow the House of Delegates to meet at eight o'clock the day preceding the opening of the meeting of the General Session. Is it your pleasure that this Chapter be so amended?

The motion was carried unanimously.

SECRETARY — I have a report to make for Dr. Bennet, Delegate from this Association to the American Medical Association in Minneapolis.

Mr. President and Members of the House of Delegates: —

I herewith submit my second annual report as Delegate from the Maine Medical Association to the American Medical Association, Minneapolis meeting.

The House met at 10.15 A. M., June 16, '13, in the library of the engineering building, one of the university buildings.

According to the Secretary's report, this Association had, May 1, 1913, six hundred twenty-three members in good standing. While there are eleven hundred seventy-six physicians in the State, practically only fifty-three per cent are members of this Society. This is not a good showing, and every member of this House of Delegates should make a personal effort to improve it. More than this, every member of this Association should have an active interest in the doings of the A. M. A. for it is the real legislative body of the medical profession in this country, while its influence is reflected to all countries.

The membership of the A. M. A. on May 1, '13, was 37,913, a net increase for the year of 3,630, which, owing to certain conditions, is not likely to be repeated. The A. M. A. is certainly doing an excellent work in its attempt to enlighten the public concerning "Nostrums and Quackery" as shown by the following quotation. "The evil of the 'patent-medicine' business and quackery has become so serious and wide-spread that there is apparently a world-wide effort to curtail it. The American Medical Association has been called on by representatives of the British government to furnish such data as it has on the nostrum evil, for use in connection with the investigation of the same subject by a British parliamentary committee. This was followed by a further request from the British consulate for another set of the same matter for transmission

by the British embassy to the government of the union of South Africa. Still more recently, there has been a request from the officials of the State of Western Australia for similar data."

But thirty-five per cent of the physicians of Maine receive the Journal of the A. M. A. This we believe to be a mistake, as it certainly ranks high among Medical Journals, and is reasonable in price.

For two years or more there has been a faction in the National House of Delegates, which were in favor of electing a speaker of the House of Delegates at its last session, whose duty it should be to preside over the meetings of the House for the ensuing year or until his successor should be elected. The argument was that the President was not always a parliamentarian, and such a person was needed to preside over the House of Delegates. Besides it would relieve the President of much care and responsibility. This seemed to the rank and file a political move, entirely uncalled for and not likely to increase the efficiency of the work of the House, and consequently voted down.

During the year, the Judicial Council has been investigating the matter of secret division of fees, the giving of commissions, and the matter of contract practice. From the statistics gathered it is evident that in the matter of secret splitting of fees, while the existence of the practice cannot be denied in any State, the degree of its prevalence varies greatly in different sections of the United States and the opinion of the local profession for or against it also varies in different regions. In the New England States—Maine, New Hampshire, Vermont, Massachusetts, Connecticut and Rhode Island—the practice is not prevalent though it exists to a slight degree in them all, being most prevalent in and towards the larger cities of Massachusetts and in that part of Connecticut that is near New York. In New York State, the practice varies, some counties being nearly free of it, other counties and the large cities being filled with it.

The value of the services of the general physician are still misunderstood, are still estimated far below their worth. Added to this the economic pressure on the physician to live on a small income and care for his family is becoming increasingly difficult. It is easy to understand, therefore, that under the strain of the struggle for existence, the physician, seeing his more fortunate brother obtain relatively large fees for apparently easier work, should be filled with envy and his sense of moral obligation and his duty to his patients should suffer in consequence. On the other hand, taking into account the competition among the surgeons for opportunities to work, with a desire to increase their clientele and income, it is easy to understand how they have stifled their conscience and have yielded to the temptation to bid for the work of their wavering confrere. Excuses are easily thought of and easily made. The lower morals and lower standards of the average commercialism which they see around them are easily copied. The younger surgeon desiring to start will make his bids to split his fees, will gain a larger clientele and become more quickly established. Physicians, unable to collect their fees, will endeavor to throw the responsibility on the surgeon and obtain through him as a partial collector from their clients, the moneys which they should collect for themselves directly from their patients. The result is demoralizing to them both. The patient is brought to the surgeon, who will split off to the physician the greatest percentage of his fee, irrespective of whether or not that surgeon is the best one to perform that operation on that given patient. Furthermore, the temptation soon arises to operate unnecessarily, that the surgeon may have his fee, and that the physician may

obtain his share. From what at first seems but a harmless endeavor to collect part of uncollectable moneys due him for his work, the physician may find himself in the unhappy position of having degenerated into one who is dishonestly exploiting his patient for an unnecessary operation that he may share the proceeds of a dishonorable act. The surgeon who aids and abets in these practices or who trusts to the size of his bid to increase his surgery, has demeaned himself and has degenerated from an honorable to a dishonest man.

It is interesting to note the reasons given for this secret fee splitting, as justification, in the statistics which form the basis of this report. One of the most common reasons is that it is justifiable because of the disproportionate fee between the amount paid the surgeon and the amount paid the physician, who has made the diagnosis and referred the patient to the surgeon. This is on the basis that a wrong has been done the physician because his services are not as well paid as the surgeon's. But two wrongs never yet made a right, and further wrong doing of taking a patient to a surgeon because he will split the most generously, does not remedy or make up an injustice, however great, to the physician. The physician's remedy is along other lines, not one of dishonesty to his patient in which he betrays him according to the size of the fee obtained. Another reason given is that it is nobody's business what a surgeon does with his fee after he has earned it. But it is the patient's business to know for what he is paying, whether it is that he is paying for the best work obtainable from the best man to perform that work, or whether he is paying an inferior man to consummate a dishonest bargain with his physician, and the patient has a legal and a moral right to know which he obtains. Many other reasons are given, all of them expressing in some change of thought and language that the splitting of a fee is justifiable because the patient will pay more readily for the work of a surgeon than for the work of the family practitioner. All of them containing the same fallacy that it is justifiable to exploit a patient for all the money that can be squeezed out of him and not on the basis of giving the best service possible. Other reasons are that fee bills charge too little for medical skill and too much for surgery. Here, too, the remedy lies in the hands of physicians themselves and gives no justification for the exploiting of patients. Other reasons are more frankly truthful, such as "purely on the grounds of good business" and "because every one else is doing it" and "unless you do some other man will." These frankly but tacitly admit the low standard of commercialism on which these men have put their profession.

The consensus of opinion regarding these matters held by the House of Delegates, may be summed up as follows:

"The remedies for the conditions here discussed lie partly in the hands of the American Medical Association, partly in the hands of the constitutional State and County bodies, and partly in the hands of the medical profession as individuals. The secret splitting of fees and the giving or receiving of commissions are best remedied by the profession announcing that it demands publicity in all transactions between patients and the members of the profession, and refuses to sanction the retention on the roster of any of its organizations the names of those who are proven guilty of these practices."

I would call the attention of the State and County Secretaries to the subject "Speakers Bureau," which is under the care of the Council on Health and Public Instruction. Through this bureau information of great value to the public may be obtained at small cost.

Medical Education: That the American Medical Association is exercising

a strong influence toward the improvement of medical education in the United States, seems well established. The number of medical schools is now reduced to about one hundred and a further reduction of twenty-five per cent of those is hoped for and expected. As the number of schools has decreased, the standard has been raised. The indications seem to point to a four year High School course, supplemented by two years of scientific work in a reputable college, as the minimum preparatory training, followed by four years' work in a medical school, and this succeeded by at least one year as intern. The last is compulsory before receiving his degree.

The work of the National House of Delegates is so vast and far reaching that any attempt at a review is entirely impossible.

In conclusion, allow me to thank the members of this House for the honor conferred upon me by my election to the House of Delegates of the American Medical Association, for the sessions of 1912 and 1913. I only regret that I have not been able to serve this Association better.

(Signed) E. H. BENNET.

DR. HARDY — You have heard Dr. Bennet's report. What will you do with it?

Unanimously voted that it be referred to the Committee on Publication.

DR. HARDY — If there is no other business to come before this House of Delegates, a motion to adjourn is in order.

DR. GILBERT — I would like to say just a word in regard to the County Editors. The County Editors are appointed by the County Societies. Each county is supposed to elect its own County Editor and hold him responsible for sending in the county news for the Journal. We must depend on the County Editors sending in the reports of the county meetings to the Journal. It is about the only reliable way of getting this data.

It was unanimously voted to adjourn to one o'clock, at the same place.

Adjourned.

W. BEAN MOULTON,

Secretary.

Portland, Maine, July 3rd, 1913.

The meeting was called to order at one o'clock in the afternoon, President Marsh in the Chair.

DR. MARSH — Is the Committee on Resolutions on the death of Dr. Weeks ready to report at this time?

The Committee, consisting of Dr. Addison S. Thayer and Dr. F. P. Webster, were absent.

DR. MARSH — The only thing I have here that remains over is the report of the Committee on Nominations for the election of officers for the ensuing year. Has any member of the house any matter he would like to bring up at this time?

DR. JORDAN, South Portland — While we are waiting for this Committee to come in, I would like to say a few words.

It seems to me only fair that this Association should pay the expenses of our representative to the American Medical Association. The man, who goes as our delegate, has to pass out his good money for our benefit. It does not seem hardly fair to expect it of him, and most of us cannot really afford to do it. We are getting the benefit, it seems to me, of all that he sees and hears. It seems to me that it would be only fair for us to pay his travelling expenses and hotel bills so that he can have his own money to spend in the necessary ways that always occur in visits of this kind. In going around to these different conventions, if you get anywhere at all or get anything worth while, the only way to do it is to be a "good fellow," and the only way a man can do that is to pay out his money. He really must, and if he has to pay his expenses besides and lose the time he has to be away from his work, he cannot afford to do it. He cannot afford to spend the amount of money that is necessary to get the real inside information, for the sake of bringing home something to us. I have attended lots of conventions in my day and have always tried to bring home something worth while, but it has never failed to cost me money to do it. We reap the benefit, and I believe that if we should pay his expenses, he would be enabled to entertain some of the big fellows a little and get into the ring. I would move you that we pay the actual expenses of our delegate to the American Medical Association.

The motion was seconded and it was unanimously voted to pay the expenses of the delegate to the American Medical Association.

PRESIDENT — We will now have the report of the Committee on Nominations for the ensuing year.

First Vice President — Eben Marston, Bath.

Second Vice President — C. J. Emery, Biddeford.

Secretary — John B. Thompson, Bangor.

Treasurer — E. W. Gehring, Portland.

Councillor Fifth District — Stephen E. Webber, Calais.

Councillor Sixth District — T. S. Dickison, Houlton.

Committee on Scientific Work — F. Y. Gilbert, Portland; T. J. Burrage, Portland; and the Secretary, *ex officio*.

Committee on Public Policy and Legislation—D. A. Robinson, Bangor; T. E. Hardy, Waterville; S. J. Beach, Augusta; President and Secretary, *ex-officio*.

Committee on Necrology—J. A. Spalding, Portland.

Committee on Venereal Diseases and Their Prevention—F. N. Whittier, Brunswick; A. L. Stanwood, Rumford; E. E. Holt, Portland; F. H. Jackson, Houlton; Addison S. Thayer, Portland.

Visitors to Insane Hospitals—J. M. O'Connor, Biddeford; B. F. Sturgis, Auburn.

Delegate to American Medical Association (for 2 years)—Stanley P. Warren, Portland; R. H. Marsh, Guilford, Alternate.

Visitors to the Medical School of Maine—H. F. Bartlett, Norway; B. F. Makepeace, Farmington.

Chairman Committee of Public Health among Women—Lucinda P. Hatch, Portland.

Cancer Committee of the Maine Medical Association—F. H. Jackson, Houlton; S. E. Webber, Calais; G. B. Swasey, Portland.

A Special Committee on Medical Registration Law was appointed—T. E. Hardy, Waterville; W. C. Peters, Bangor; Owen Smith, Portland; D. B. Cragin, Waterville; G. R. Campbell, Augusta.

PRESIDENT—You have heard the report of your Committee on Nomination. Shall we vote separately on these names or shall one vote be cast for all of them?

DR. MARSHALL—I would move that the Secretary be instructed to cast a vote for the House of Delegates collectively, for the list of officers for the ensuing year as read by the Committee on Nominations.

The motion was seconded and the Secretary cast the vote for the House of Delegates for the officers as read by the Committee on Nominations and they were declared elected.

PRESIDENT—You have elected the officers as read by your Committee. I know of nothing further to come before this body unless some member has something he wishes to present at this time. This is the last meeting of the House of Delegates, so that if any of you have anything on your mind that you would like to discuss, this is the time to do it. I think it is our duty to remain in session until the general session opens, as there may be further business to come up.

SECRETARY—I would like to ask Dr. Hardy about what has been done with the Gage matter?

DR. HARDY—The Council considered the matter and, thinking it best to report at the general meeting, gave me the papers and asked me to report it. I hardly know what I am to say except that I have the papers to read. As I understand it, the particular object in having it acted upon is to have it considered by the Maine Medical Association. They want the thing to have a standing before this body and the mem-

bers of the Council present this morning were unanimous in sending it to the general meeting. Perhaps it would be a good idea to go over the matter and learn something about our State registration officials. That ought to interest us. The matter ought not to take a great deal of time. It is brief.

DR. GILBERT — Dr. Alfred King spoke to me today in regard to some investigation of the companies conducting these medical defense and surgical liabilities and their methods of business. There seems to be some feeling because the cost of these policies was raised the last year.

Dr. King spoke of the matter to me and about introducing something into the general session. I told him I thought it might be better to consider the matter here and see what could be done. It is his idea that a Committee of two or three should be appointed to investigate that type of insurance and also to look more thoroughly into the virtue of Medical Defense Funds as conducted by the different States, with the hope of finding the solution of the whole matter. I move you that a Committee of three be appointed by the Chair to take this under consideration and report at the next meeting.

DR. LITTLE — There is a side to this subject that I would like to introduce in this liability insurance business, and that is the conditions of those corporations which employ a good many hands. They take out a blanket policy on their men so that in the event of an accident, the company employs a physician to attend the man who is injured, and so renders what they call first aid. Now sometimes a man is not injured very severely and the amount of work done by the surgeon is not a great deal. But, again, a man is injured severely and the surgeon, who is called to attend this man, renders his services, for which he never gets any recompense in proportion to the work he has performed. The corporations call for the best work for their men but, as soon as the bill is rendered, there is an attempt on the part of the corporation or the insurance company to dodge payment. If there is any payment, it is usually very small in proportion to the work performed and the bill rendered. As a rule, this is one of the worst things I have had to contend with in Portland, this payment for surgical work performed at these times. I am bringing it to your attention to see if you can suggest any way whereby something may be done to get the recompense to be proportional to the work performed. I protest against the insurance companies quoting the prices we shall ask for our services.

PRESIDENT — I think this matter of price rests a great deal with the surgeon. In the little town where I live we have woolen mills, all

covered with these blanket policies. I have done a great deal of their work and my prices always vary in accordance with the services rendered. For instance, the last work I did for them was a dislocation and fracture of the tibia and dislocation of the fibula. I attended to the man, put on a plaster cast and started for the hospital. I charged them fifty dollars for the work and had no trouble whatever in collecting my fee. If I had a similar case, I should make the same charge of fifty dollars. For an ordinary office call, I charge two dollars, where I charge one from my neighbors for the same amount of work. If they were not covered by this policy, I should charge a dollar for fees when they came to the office. So far, I have never had the slightest trouble with the insurance company and everything has been satisfactory.

DR. LITTLE — I have not had such a pleasant experience, I regret to say. Time and again, if the company is liable on the breaking of machinery they get out of it in some technical manner. For instance, something flies from some point and strikes a man in the eye. They claim that there is no defect in the instrument the man was using and so they are not responsible for the injury to his eye. The surgeon that takes care of the eye gets nothing since the company takes the ground that the machinery was in perfect condition. These things work in various ways to make it difficult for the surgeon in collecting his fees.

PRESIDENT — To whom do you charge these fees?

DR. LITTLE — We usually send the bill to the corporation that calls us in.

PRESIDENT — We do a little different in the small towns. The insurance company sends a check directly to the surgeon.

DR. JORDAN — I think a great deal of the trouble lies more with the lawyers that the company employs than with the insurance companies. We have a factory at South Portland where they injure on the average four men a week. It is anywhere from a piece of steel getting in their eyes to a scratch on the arm, and I get a great deal of that work. I usually charge for first aid enough to cover the entire cost of the work that I would do on that man. For instance, I had a case where I had to amputate the finger and I sent a bill for fifteen dollars. The company paid it and when they settled with that man, the lawyer called me up and asked why I charged fifteen dollars. He said they usually paid ten dollars for amputation of a finger. I got out of it by saying that if the company was represented by Judge Foster instead of by whom it was, it would probably cost them a good many five dollars extra, and that we had a great deal better surgeons

in South Portland than in Portland, which would perhaps help to account for the small difference. I think there is where the greatest amount of the trouble lies. The lawyers try to make money out of these companies at our expense.

I had a case where I rendered a bill for fifty dollars to a corporation. They wrote me that my fee of five dollars seemed small and wished to know if it was correct. I immediately sent them a new bill for fifty dollars and a blank bill also and told them if they were not satisfied with my charge, they might fill out the blank bill in such an amount as they considered I ought to have. As the boys say "I got mine" the next day. I got the fifty dollars. It has been my experience that, if we hold them right down to it instead of allowing them to cut fees to suit the advice of some lawyer, who knows nothing about the circumstances of the case, or the work which has been performed, they will pay.

PRESIDENT — Are you ready for the resolution?

It has been moved and second that a committee of three be appointed by the Chair to investigate the present cost of the Surgeon Liability Policies, also the so-called medical defense plans as conducted by the majority of States, and their results. Said Committee to report at the next annual meeting of the House of Delegates or to the General Session through the medium of a paper to be placed on the regular program.

PRESIDENT — Gentlemen: You have heard the motion presented by Dr. Gilbert. What is your pleasure?

It was unanimously voted to accept the motion and carry out its intent.

PRESIDENT — Is there any further business to come before the House of Delegates?

SECRETARY — This will be the last meeting of the House of Delegates and if anybody has anything on their mind that they would like to discuss, they had better get it off now before the meeting is adjourned.

PRESIDENT — You know we do not want to go away with a burden on our minds. If there is no further business a motion is in order to adjourn.

It was moved and seconded that the meeting adjourn.

The vote was unanimous and the meeting adjourned.

Adjourned.

W. BEAN MOULTON,
Secretary.

Council.

ALDERMAN'S CHAMBER, PORTLAND, JULY 3, 1913.

Vice President, T. E. Hardy, presiding.

The accounts of the Treasurer were audited and found correct.

The action of the House of Delegates in voting funds to the committees for the ensuing year was sanctioned as follows:

The "Committee on Necrology," Dr. Spalding, was voted an appropriation for stamps and necessary disbursements.

The "Committee on Venereal Diseases and Their Prevention," and the "Cancer Committee" were voted funds not to exceed fifty dollars each.

The salary of the Secretary for the ensuing year was continued at \$200.

The salary of the Editor of the Journal was continued at \$200 and the Editor was empowered to employ necessary assistants. Funds for the Journal were continued as formerly.

The Medical School of Maine was voted a scholarship of \$100.

It was voted to pay the hotel and traveling expenses of the delegate to the A. M. A. and the expenses of the President in visiting the County Societies.

It was voted to hold the next annual meeting as early in June as possible and not conflict with the meeting of the A. M. A.

Dr. Gage of Swan Island presented a complaint in regard to the registration of Dr. Fuller of the same place. After a hearing it was voted to refer the matter to the general session for discussion.

Adjourned.

W. BEAN MOULTON,
Secretary.

WHAT A MAN MIGHT COST.

A German physician has been calculating, amusingly, the price for which a man might be reconstructed according to prices demanded by modern science. A pair of arms would cost, he says, about \$75, and the same arms with well jointed hands and fingers would come to \$175. A pair of legs would cost \$140, a good nose between \$80 and \$100, a pair of ears with resonators \$150, good teeth 60, and a pair of artificial eyes 30. And there you have a man well made over for about \$750.

County News.

HANCOCK.

A regular meeting of the Hancock County Medical Society was held at the residence of Dr. Fremont-Smith, Bar Harbor, on Wednesday evening, July 9.

The meeting was called to order by the president, Frank R. Ober. After the transaction of regular business, Dr. Smith read a very interesting paper entitled, "The Nutritional Effects of Adolescent Albuminuria." The paper was thoroughly discussed by Dr. Thatcher of New York, Dr. Augustus Thorndike of Boston, Dr. Mitchell of Washington, Dr. Mende of Switzerland, Dr. Wakefield of Bar Harbor, Dr. Higgins of Bar Harbor, and Dr. Ober of Northeast Harbor. Dr. Smith then closed the discussion.

Dr. Wakefield of Bar Harbor, next read a paper on "Treatment of Acute Appendicitis." The paper was discussed by Dr. Thatcher, Dr. Twitchell and Dr. Smith, the discussion being closed by Dr. Wakefield.

A large number of visiting men were present, the total attendance being about twenty-five.

The meeting was then adjourned and an excellent collation was served by the host.

Everyone expressed themselves as having heartily enjoyed the meeting.

FRANK R. OBER, *County Editor.*

YORK.

The 73rd quarterly session of the York County Medical Society was held at Cape Porpoise, June 27. Drs. Harris P. Ilsley of Limington and Herbert A. Owen of Bar Mills were elected to membership. A letter from the Business Men's Association of Biddeford was read, and it was proposed to invite the Maine Medical Association to hold their annual meeting in Biddeford whenever it can be arranged satisfactorily. It was decided to let this matter lay over for action at some future meeting.

The subject of contract and lodge practice was brought up and the sentiment of this society is to exclude from membership those physicians who continue to engage in such practice.

An excellent shore dinner was served at the "Stone Haven." It was the annual "Ladies' day" of the Society and there was an unusually good attendance. The physicians present: Drs. J. D. Cochrane, L. E.

Willard, C. E. Thompson, R. L. Maybury, Laura M. Stickney, Saco; C. E. Lander, S. B. Marshall, Alfred; W. E. Lightle, L. H. Brown, No. Berwick; T. C. Lord, Kennebunk; B. M. Moulton, Springvale; A. S. Davis, Maplewood; E. C. Cook, F. W. Smith, York Village; W. W. Smith, Ogunquit; E. D. O'Neill, F. L. Davis, J. M. O'Connor, D. E. Dolloff, A. C. Maynard, Biddeford; H. L. Prescott, Guy Hinsdale, Kennebunkport; W. W. Verrill, York Harbor; A. L. Jones, Old Orchard.

ARTHUR L. JONES, *Sec.*

Personal News and Notes.

Dr. Clarence F. Kendall of Biddeford, who is a major in the National Guard, visited Gettysburg during the recent anniversary convention. He was connected with the corps of physicians who attended to the physical condition of the veterans on the trip to and from the battlefield.

Dr. A. C. Maynard of Biddeford has purchased the residence on Centre Street, in that city, formerly owned by the late Dr. J. A. Lapointe.

Dr. George Charles Precourt, Bowdoin Med., '08, of Biddeford, and Miss Hilda Marie Louise Precourt were married in Middleboro, Mass., June 10th. They reside at 86 Bacon St., Biddeford.

Dr. J. R. LaRochelle of Biddeford returned a few weeks ago from a European tour.

Dr. Philip Thompson and Dr. Harold Everett have gone abroad for a few months.

Historical Removal of a Foreign Body from the Aesophagus.

If you were to ask any surgeon of the earliest instance on record of a successful removal of a foreign body from the *æ*sophagus, he would probably shake his head and give it up as a joke. The truth of the matter is, however, easy to define. For in *Æ*sop's Fables, the crane removed a bone from the *æ*sophagus of the wolf. The old sage might have added that it was also the first instance on record of the intruder being removed without focal illumination, X-Ray, or preliminary local anæsthesia. Odder still the antiquarian observes that the operation was the first instance of free treatment, for when the crane asked for a reward the wolf said: "Didn't I let your head out of my jaws for nothing?"

Book Review.

Nitrous-oxide-ether Anesthesia.

BY F. J. COTTON, M. D., AND W. M. BOOTHBY, M. D.

Andrews of Chicago in 1867 and Bert of Paris in 1879 showed that a mixture of 80% nitrous oxide and 20% oxygen produced an ideal anesthesia in many cases. More recent work has showed that in some cases a varying amount of ether vapor is necessary to obtain complete relaxation.

All experimental and clinical work has emphasized the fact that a constant mixture, rightly proportioned for the particular case, produces a smoother anesthesia than a mixture with an irregular and intermittent supply of either gas, therefore, an ideal apparatus must be one that gives a mixture of the two gases in any desired constant proportion and at the same time allows any amount of ether vapor to be added as needed.

Hewitt Teter and McKesson developed machines along this line, but as all have a drawback, Cotton and Boothby designed one of their own. In using this anesthesia, four important requirements must be met and their apparatus is so constructed that it meets these conditions. These requirements are: 1. There must be a regular flow of each gas at any rate desired. 2. The flow of gases must be visible. 3. There must be an efficient method of adding ether vapor. 4. The facepiece must be absolutely air-tight.

The aim of the anesthetist is to determine as early as possible the proportion of nitrous oxide and oxygen necessary for the patient. After this is ascertained the apparatus will deliver the mixture desired as long as needed, leaving the patient in an apparently normal sleep. Unconsciousness is lost in two minutes, but complete relaxation is not obtained for ten minutes. In the anesthesia the body of the patient is a pink color. The patient breathes quietly with no sign of cyanosis. Cyanosis is a danger signal and is due to an improper proportion of gases or to obstruction of the air passages.

The symptoms of an overdose of nitrous are stertorous respiration, excessive secretion of mucus, then a death-like pallor, fall of blood pressure and loss of body reflexes. No attempt should ever be made to increase the intrathoracic tension.

Cotton and Boothby believe this anesthesia in proper hands to be as safe as or safer than ether.

J. B. H.

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

SEPT., 1913.

No. 2

THE PRESIDENT'S ADDRESS.

R. H. MARSH, M. D.

Members of the Maine Medical Association:—

It is commonly understood that "It is more blessed to give than to receive," but, as I look back over the year that has just passed, it is an open question in my mind whether my greatest blessing has been the realization of the great honor you conferred on me in electing me to the highest office of this association—a professional honor second to none in the State—or whether it has been in being thus placed in a position where, in performing the duties of my office, I could give my services with a feeling of so much pleasure and satisfaction, through the realization of the hearty co-operation and support given me by my fellow members. It has been a happy year, and a proud one; and to all of you who have so generously co-operated with me in the furtherance of our mutual efforts to advance the object of our association, I thank you most sincerely.

The analysis and consideration of a unit always involves an examination of its component parts; and in looking back over the work of the association during the past year, let us for a moment inquire into the work of our county medical societies. I have sometimes wondered how many realize the importance of the work done by these bodies. They are to our association what the child is to the family:—are molecules inseparably interwoven in the unit; with these molecules our entire structure is built, and upon their solid foundation alone rest the success and prosperity of our larger body. Their problems are our problems, their interests are our interests, and only in

such measure as we succeed in promoting and fostering harmony, unanimity of purpose, enthusiasm, and good fellowship in the societies, can we hope to obtain these essentials in our association. It behooves each and every one of us to do his utmost to keep the membership of his society full, the attendance large, the standard high, the progress rapid but sure, and to make the meetings resound with enthusiasm and good fellowship, so that, as each year draws to a close, he can look back with pride, and truly say, "Our work has been well done."

Times change:—They will change anyhow, it is the natural course of human progress, without regard to personal opinion; and wise is the man who realizes that he must change with them. "Up-to-date" and "keeping up with the times" are merely popular expressions of the day, but the constant gradual evolution which we term "Change in times" can always be traced back to some astute, observant man, no matter in what vocation he is employed,—our profession, not different than others—the eminent man's ideas are improved and elaborated on by another, and there is a never ceasing change and readjustment of certain conditions resulting in what we all recognize as a mark of progress. This progress with its constant changes keeps the busy practitioner ever on his guard, for, if he does not keep himself carefully posted concerning these changes, he will find himself left by the wayside, lingering with those destined for an early death in the life of his chosen profession.

MEDICAL LEGISLATION.

Since the time of Hippocrates, there have existed certain forms and requirements regulating the practice of medicine and surgery—these forms and requirements have grown out of the needs and advancements in the education of the human race, and this evolution of the general requirements is found to be in keeping with the times in which we live. The middle-aged and elderly physician can vividly remember the time when the State of Maine did not prohibit the quack from holding his clinic in the most public places in our cities. We can easily remember the years of constant effort of the energetic and progressive physicians in the struggle with the Legislatures to obtain the Law of Medical Registration that is today upon our statutes. This law, established in 1895, fulfilled for years the needs for which it was made; it has served and protected us well; it has helped to raise the standard of medical education in our State; it has placed the profession in a position where it can carry out its work in an ethical and scientific manner; but, best of all, it has helped to protect the

innocent from that innumerable herd of uneducated and unprincipled imposters that infested our towns and cities.

This law was in keeping with the times; but in this age of progression, as we advance toward perfection in the healing art, striving to be governed by the laws of progress which tend to govern all of the learned professions, it is fitting and imperative, in the thinking minds of the profession, that there be some changes made in the law of Medical Registration in the State of Maine.

The Board of Medical Registration has for a long time considered it necessary, for the good of the public, to make a slight change in the wording of the law in Chapter 17, Section 16, where it reads "or any other method of healing if no *poisonous* or *dangerous* drugs are employed." The Board presented an act at the last session of the Legislature asking to have the adjectives "poisonous" and "dangerous" stricken from the line, so it would read "or any other method of healing if no drugs are employed." This act should have passed. It would then have placed the employment of drugs in the hands of those trustworthy and competent.

The Board was given a hearing before the committee, but, as in many other cases of similar nature, the act received an unfavorable report, and it was likewise dropped. The manner of disposing of this act, as well as many others pertaining to public health, demonstrates to us that the average legislator has no knowledge of the needs of the public in regard to medical legislation, and takes but little interest in the matter of public health.

These matters relating to Medical Legislation should be given the most considerate thought of every member of this association, not only that he may be conversant with the subject himself, but that he may be able, and should consider it his duty after due deliberation on those subjects that need protection from the charlatan, to explain to his senator and representative the *objects* of and *benefits to be derived* from such proposed laws. Not until then will they understand that we, as physicians, look upon the matter of law-making concerning Medical Legislation and Public Health as a part of their work, in which they need the help and co-operation of every physician in this State, and that if guided by a body of men competent to judge the needs pertaining to the health of every individual, through knowledge gained by years of study and experience, they will then be better prepared and will have an understanding of the real meaning of Medical Legislation. Until they arrive at this understanding, and not until then, can a body of Legislators frame laws which will be the most beneficial to the public health.

CARE OF THE INSANE.

Our professional work directs our interests to many institutions, homes, asylums and hospitals of varying character. Among these, and in the foreground in my mind stands our hospitals for the insane, with 1,500 inmates gathered from all sections of the State and covering all nationalities, grades of intellect and conditions of body. We pride ourselves upon the fact that we are able to give this class of patients treatment by specialists thoroughly competent in this branch of diseases. We have erected buildings of enormous capacity, with all of the modern improvements known to our trustees. We furnish the theatre, the opera, and other amusements of good character. We expend each year thousands upon thousands of dollars for this good cause — and are still willing and anxious to expend thousands more, if necessary, for the comfort of these unfortunate people; and, after we have done all of this, have we fulfilled our duty as physicians to whose care are entrusted the health and the sanity of the human race? I would emphatically answer NO.

I think you will agree with me when I say that we should give more attention to mental hygiene, as is being done in other States, Massachusetts for instance. In that State there is what is known as the Massachusetts Society for Mental Hygiene. "The chief aim of this society are: First — to work for the conservation of mental health; second — to raise the standard of care of those suffering from mental disorder or in danger of developing it; third—to familiarize the public with the methods adapted to the care and treatment of such patients."

In our State, we have not a society of this nature, but we are an association large enough and broad enough to cover any branch of medicine that would in any way be of benefit to the present or coming generations; therefore, let us look into this matter; and I would suggest that there be a committee established whose duty it should be to gather information, throughout the State, relating to the cause of insanity, and means for the promotion of Mental Hygiene; and last, but not least, there should be some adequate measures carried out for the after care of the discharged insane.

At the June meeting of this body, in 1912, this association approved two proposed bills relating to the insane: the first for the admission to the hospitals of voluntary patients, and the other for emergency commitments. The bills were introduced in the Legislature, and the committee reported favorably on the first, but it died an early death on its route to the governor. The emergency commitment bill did not receive the favor of the committee. The committee did, how-

ever, consider a new draft, and it soon passed along to become lost in the large grist of business during the last few days of the legislature.

These bills would materially improve our insanity laws. They have been in successful operation in New Hampshire and Massachusetts for several years, and I would urge that they be carefully looked after at the next session of our Legislature.

SCHOOL PHYSICIAN.

Of the many important duties entrusted to the general physician, as guardian of the health and prosperity of our future men and women, there is none of more importance than that of the school physician; for in our public schools gathered from all classes, and many nationalities, we find a large number of our children with diseases and deformities amenable to treatment and correction, if discovered in the early stages.

This office should be filled by some one well trained in general practice, conscientious in his work, with a realization that for the children, under his care, inspection and advice, depends the making of lives of usefulness. It is by his careful observation and personal interest in each pupil, coupled with an acute perception of diseases incident to childhood, that he may realize in the full sense the object of this office.

There is no better opportunity than in this position, for an observant physician to be of service to mankind, and to watch with pride the transformation of the dull, indolent, puny and listless child to an active, alert and energetic being. It is a duty, then, that we, as teachers of health, owe to the public at large, to advocate in each town the importance of the school physician, and give every possible aid in bringing about its establishment, for, by so doing, we help to raise the standard of morality, health and education.

MEDICAL JOURNAL.

In all societies, especially those of a professional character, it is important that there be some organ by which its deliberations shall be made known, as well as the progress of its work, and in which should be published original articles of worth, in order that they be preserved for future reference.

It was the custom of our association, in years past, to publish the proceedings of its annual meetings in a volume by itself — a very good and correct way of doing — but as our association increased in membership, and its treasury would permit, it was considered advisable, by

a large number of its members, to publish a Journal, which should be the official organ of the Maine Medical Association. This, to my mind, was a step forward.

The first number of the Journal of the Maine Medical Association was published in 1910. As usual, the work of such an enterprise has fallen upon a few, but these few have labored faithfully to bring it to the standard of other State Journals, and with untiring efforts have placed it in a position where we consider it an essential feature of our State Association. But in order to place it upon a *solid* foundation, the columns of original articles should be increased to quite an extent—the county editors should give more attention to the general proceedings of the meetings, making full reports of their transactions, also gather such information regarding members of the profession as would be of interest to physicians.

Every physician who accepts the position of county editor should remember that the success of the Journal depends in a measure upon the manner in which he performs the duties of his office, and if he would make the Journal a volume of general interest, he must perform this duty faithfully.

VENEREAL DISEASES.

The only way to overcome that great problem so much in the minds of physicians and educators of today—the problem of venereal diseases—is to treat it in a rational way, that is, to educate the people.

We should begin at home by teaching the youth. Throw off that old cloak of false modesty, teach the young the facts concerning the origin of life, and with it the dangers of the social evil.

We should have printed for distribution proper literature showing the prevalence of venereal diseases in the prostitutes; and the laws now enacted relating to prostitution should be vigorously enforced.

And above all, for the health and happiness of the coming generations, parties contemplating matrimony should be required to furnish certificates denoting that they are free from such diseases.

The committee already established on venereal diseases should receive the co-operation of every member of this society, in carrying out the work which they have so earnestly and faithfully begun.

TUBERCULOSIS.

The care and treatment of tuberculosis, in the past, has been a chapter in the history of medicine full of disappointments, and groping in the dark. Many ideas of as many eminent men have been ad-

vanced, to live but a day and then pass as quickly as they came. Medicines, too numerous to mention, sera, vaccines, tuberculine injections, diet, and open air treatment, all have played their part in bringing about the recognized treatment of the present day; but we are still waiting for some wise man to present to the profession the much desired specific. And while we wait, the laity are looking to us to care for this disease, and protect them from the inroads that it makes each year. The public has a right to look to the medical profession for this protection, and we as physicians should make plain to the public the fact that, if we care for and protect the people from this disease, it is necessary that we have their co-operation in carrying out plans already formulated; that we have their assistance in obtaining from the legislature such appropriations as are necessary to establish, equip, and maintain sanatoria to be devoted entirely to the disease. Therefore, let us not be discouraged by our many defeats at the Legislature, but, knowing as we do the necessity of this plan, continue the fight, and in due time we shall be rewarded by seeing institutions for the care and treatment of tuberculosis established in every county of the State.

In conclusion, allow me to state that I am not unmindful of the fact that this address, made up, as it necessarily is, of many different topics, and each treated superficially, can only act as a reminder of some of the many subjects to which this association should give careful attention.

The subjects above mentioned, Medical Legislation, The Care of the Insane, School Physician, Medical Journal, Venereal Diseases, and Tuberculosis, I am fully aware cover only a small part of the vast number of subjects that each day come to the attention of the physician. That such subjects as Preventative Medicine, a subject of importance to every physician and vastly more to the public, too broad in all of its dimensions for me even to attempt to write upon; Medical Charity, a topic needing our consideration; Contract Work, much talked of in some sections of the State; the Department on Cancer, which is receiving the close attention of the master minds in the profession; these and others too numerous to mention could be brought to your attention as subjects needing the consideration of this body, but time and space forbids.

The life of the general practitioner is one of constant and practical attention to the routine of general work. He may have acquired a literary education as well as that of his chosen profession; he has not the time to devote to systematic investigation in the laboratory; he may not have the disposition or even the talents to devote to phil-

osophic studies; but it does not necessarily follow that one who gives most of his time to scientific investigation performed in the laboratory can be of the most benefit to suffering humanity. The man who goes forward with a true heart, giving to his patients the best that is in him, watching, constantly and faithfully, the many changes in health and disease, acquitting himself like a true man, may observe as truly and accurately as one devoting a large part of his time in the laboratory.

We watch with admiration the flights of genius in its achievements, but common sense has much to do with great and useful research.

Let us magnify the calling of one of the most useful professions with high and holy aspirations,—may we seek perfection, and as we pass down the line of time, touching elbows with our neighbors, may we occasionally during our active life glance backward and view with pride the achievements of our noble profession.

Again allow me to thank you for the honor you so generously conferred upon me in June, 1912. I crave your indulgence and assistance during the remainder of this session.

THE VALUE OF PREOPERATIVE STUDY IN MAJOR GENITO-URINARY SURGERY.

BY JOHN H. CUNNINGHAM, JR., M. D., BOSTON, MASS., U. S. A.

Read before Penobscot County Medical Society, February, 1913.

During the years of the present century, great advances have been made in the diagnosis and treatment of genito-urinary diseases. Up to the present century, major genito-urinary surgery was largely in the hands of the general surgeon. To be sure, the genito-urinary surgeon existed prior to this time but the general surgeon and the practitioner did not generally appreciate the position then as they do now.

Our better knowledge of diseases of the prostate, bladder, ureters, and kidneys has been brought about chiefly by the adaptation of the Roentgen rays, and to a more general use of the improved cystoscopes and urethrosopes. Today, the surgeon is making use of the cystoscopist or doing cystoscopy and ureter catheterization himself and requiring Roentgen ray plates as a part of the physical examination of the patient prior to operating, and this is as it should be. The reason that genito-urinary surgery stands today as a specialty is due to the

fact that it comprises many technical procedures of examination and operative technique which the general surgeon has neither the time nor disposition to master; and, in consequence, while his work is eminently satisfactory in most respects there is a constant percentage of error in operative genito-urinary cases which could be greatly lessened by the employment of modern methods of pre-operative study. That the genito-urinary surgeon is of value in assisting in diagnosis, is becoming generally appreciated. That he can perform the major operations better than the active general surgeon, in possession of the facts obtained from pre-operative study, is open to question. The knowledge to be gained by cystoscopic and the allied methods of diagnosis has attracted many to this field of work. As it appears to me, these men fall into two distinct groups, those entering the field with little or no sound general surgical training, who are capable of excellent diagnostic work and with the ability to perform the finer manipulations with the special instruments, but unfit to do the major surgery connected with this subject; and a second, rather smaller group of men well trained in general surgery who are able not only to carry on the various pre-operative investigations but who are, through their surgical training in a position to apply this knowledge in connection with operative technique, and are capable of dealing with whatever accident may occur or whatever associated surgical interference that may be indicated and apart from the genito-urinary problem under consideration. It is only recently that I saw a genito-urinary surgeon of recognized ability perform an operation for fixation of a movable kidney on the right side in a patient who, at the time of operation, was found to have gall stones and the gall bladder was left untouched because he felt that he did not have the ability to deal with this latter condition. It is a grave question whether the gall stones did not cause more trouble than the movable kidney. So often gynecological conditions are associated with urinary symptoms and lesions that the urologist who is not in possession of surgical ability in this field is only partially equipped to do that which, in reality, his responsibility calls for. Briefly then, we have the urologist capable of furnishing most valuable pre-operative data which should be, I believe, simply an aid to the surgeon, and the genito-urinary surgeon, who is not only capable of carrying on these methods of study but equipped with a working knowledge of general abdominal surgery, especially in the field of gynecology.

To return to the subject of what the genito-urinary specialist has to offer which is a distinctive part of surgery. With the various types of endoscopes, the pathological conditions of both the anterior and deep urethra can be detected and through them, otherwise obstinate

pathological conditions may be appropriately treated. With the cystoscope, the prostate, bladder and urethral orifices may be inspected. By means of the ureter catheters the permeability of the ureters may be decided and the urine collected separately from each kidney for examination; and the functional capability of the renal tissue in each organ can be accurately determined by several different tests. The cystoscopist working with the Roentgenologist can, by means of a ureter catheter containing metal, show the course of the ureters and determine whether a shadow resembling a stone in the ureter is really a stone in the ureter or some body near by; and by injecting a solution of one of the silver salts either Argyrol or better Collargol into the kidney pelvis through the ureter catheter, the internal arrangement of the renal cavities can be accurately conveyed to the X-Ray plate. The co-operative work of the cystoscopic and the Roentgenologist is of the greatest practical value.

While the finer manipulation associated with cystoscopic technique requires a long practice, a simple cystoscopic examination of the bladder in the average case may be made by anyone who has the proper equipment. To correctly interpret what is made visible by the cystoscope does, to be sure, require much clinical experience but the difficulties of technique are not such as not to be overcome in most instances and repeated use of the instrument will give one some idea at least of the grosser conditions in the bladder, such as foreign bodies and new growths. The ability to catheterize the ureters is not difficult to acquire if one learns the technical details of cystoscopic examination, in fact, ureter catheterization is a simpler procedure than is the ability to correctly interpret many of the conditions encountered in the bladder.

Each community should have at least one trained cystoscopist and Roentgenologist, for so much depends upon pre-operative studies in major genito-urinary surgery that these advantages should be given to the patient. The experienced surgeons can take the findings of the cystoscopist and Roentgenologist and convert this knowledge to his own use. There is little question that the management of the general run of major genito-urinary cases is not as efficient as it might be and that patients are not everywhere receiving the benefit of investigation that modern methods entitle them to. It is with the desire to bring to your attention and emphasize what pre-operative investigation has to offer in the management of major genito-urinary cases that I have chosen to survey the subject as a whole rather than confine myself to technical details of any one part of it.

Today we have at our command means of detecting the location and nature of diseases in the urinary tract not exceeded or perhaps

equaled in any other branch of major surgery. The genito-urinary system embraces so many different structures often the site of the same nature of infection or disease that the subjective symptoms and objective findings by the usual methods of physical examination and urinalysis are often misleading. For example, pus in the urine may originate anywhere in the genital tract, the urethra, Cowper's glands, the prostate, seminal vesicles, epididymis or testicles, or may come from disease within the urinary system, the bladder, either ureter or kidney. If the pus originates in the urethra or scrotal organs, the condition is easily recognized, but to a less degree is this so if the disease is located in the Cowper's glands, the prostate, or seminal vesicles, and when a urine containing pus or blood is voided from the bladder it is impossible to determine its origin without a cystoscopic examination and catheterization of the ureters. A urine containing pus which is acid in reaction immediately suggests tuberculosis somewhere in the genito-urinary tract. Palpation of the scrotal organs, the prostate and seminal vesicles may exclude these structures, but it cannot be decided whether the bladder or one or both kidneys harbor the infection. Even with such a urine and a palpable kidney on one side there is no assurance that the other kidney is not infected also, and there is no justification in operating upon a patient with such a condition without a cystoscopic examination to determine the presence or absence of disease in the opposite organ and to estimate the functional power of the two organs, by the special tests, which may be employed for this purpose. An individual with known disease of one kidney may possess but one kidney, and that diseased, or there may be disease of one kidney and the other organ rudimentary, or both kidneys may be so diseased that the removal of one does not leave sufficient kidney tissue in the remaining organ to sustain life. Years ago, I assisted at an operation when the only kidney was removed, the ureters not having been catheterized, and the lesson is one that impresses the importance of this matter upon me. I have seen death follow the removal of a badly diseased kidney in the presence of an apparently slightly damaged kidney on the opposite side and I have since seen patients prevented from having nephrectomy performed because ureter catheterization and estimation of the renal function has demonstrated that the function of the relatively good kidney would not be enough to sustain life if the badly diseased organ was removed, and in consequence nephrotomy rather than a nephrectomy performed with relief of symptoms.

From the foregoing remarks, it is obvious that it is important to learn the condition of both kidneys before undertaking the operation

of nephrectomy. Observance of these various features mentioned has changed materially the operative mortality statistics in the right direction.

In diseases of the bladder, the cystoscope has been of great value, tumors and salculi have been discovered when least suspected and an accurate demonstration of their location has indicated the most advantageous manner of attacking them. Within the last two years there has been a great advance in the treatment of bladder tumors by means of the Oudine current applied through a special catheter inserted in the cystoscope. By means of this procedure, tumors of considerable size, some invading as much as one-half the bladder, have been successfully destroyed by this new procedure. What the ultimate results are going to be the future must determine, yet the promise is encouraging. As all tumors of the bladder are either malignant or many become so and even the most radical operative procedures are followed by death from recurrences which cannot be dealt with in over eighty per cent of the cases within three years of the date of operation, this new method is very welcome and promises to be the best manner in which to deal with the tumors of the bladder.

The greatest service that the cystoscope has performed in connection with bladder conditions has been to determine the etiological factor of cystitis. Too often the patient is treated for a cystitis without any knowledge of the etiological factor producing it. Cystitis must be regarded simply as a symptomatic expression of some existing pathological process within the bladder, ulceration of a tubercular or other nature which may originate in one or both kidneys without drawing especial attention to these organs, to bladder tumors, and to foreign bodies, most commonly calculi and to diviticiuli.

The value of the cystoscope in connection with diseases of the prostate, especially the common benign hypertrophy, has been chiefly in deciding the size and character of the intra-vesicle portion of the growth upon which a decision of the best manner of relieving the obstruction must rest; and as a means of determining the condition of the bladder wall (whether or not there are large diviticiuli, the result of a broken compensation of the bladder) whether or not the bladder wall is much thinned out and how much of a post prostatic pouche exists, all of which points must be determined to give a fair prognosis following any operative procedure. In this connection also the cystoscope is often the only means of determining whether or not there is associated vesicle calculus, for with certain forms of enlargement of the prostate an associated vesicle calculus will often escape detection with the stone search, and calculi are not uncommonly located in diviticiuli or encysted in the bladder wall and left after removing

the prostate. It is important therefore to determine these various features before any operation for the relief of prostatic obstruction is undertaken.

Experiments show that the best manner of relieving urinary retention depending upon prostatic obstruction is not always by a radical operation. When the obstruction is found to be due simply to a bar at the vesicle outlet or to sclerosis of the bladder sphincter these conditions are best dealt with by a special punch instrument or destroyed by one of the galvano-cautery instruments such as the Bottini instrument, which operations may be accomplished under local anæsthesia. Not only are these operations more appropriate for certain cases but the mortality is lower and the results better than by radical procedures. The determination of the condition of the prostate by the cystoscope is the only means of deciding the suitable operation to employ in the individual case.

There is a fairly large class of men who for one reason or another, usually the result of an old infection or excessive sexual intercourse, suffer from irritability of the prostate without obstruction and which group of symptoms are dependent upon lesions in the verum montanum or in the sinus pocularis. It is only through the employment of the deep urethral endoscope that these conditions are recognized and properly treated.

Having briefly touched upon the various features of pre-operative study which seem of importance, I will proceed to a more special consideration of the value of radiograms of the injected renal pelvis and ureter and the value of the stiletted urethral catheter in certain diseases of the structures.

The valuable information which may be obtained in regard to the condition of the kidneys in various forms of kidney disease and the elimination of the kidney in the differential diagnosis of obscure condition in the upper quadrant of the abdomen by the procedure of injecting the kidney with a solution which casts a shadow by the Roentgen Rays has not been brought sufficiently to the attention of the medical profession. Those expert in genito-urinary surgery have been using this means of learning the gross condition of the kidneys for the past few years and general surgeons are calling more and more upon the genito-urinary expert to eliminate the right kidney as a possible cause of indefinite symptoms directed to the right upper quadrant of the abdomen. A positive diagnosis to be made from symptoms apparently originating from the right upper quadrant of the abdomen by the usual method of physical examination is often most difficult. In this region are located many structures, some commonly, and others rarely, the

source of disease. Disease of the pyloric end of the stomach the duodenum, gall bladder, and kidney are often to be recognized without question. Yet this is not always the case and certain diseased conditions of these structures and of the liver, its ducts, the pancreas and also symptoms directed to this quadrant from disease of the appendix often make a positive diagnosis impossible without exploratory operations. Even an exploratory operation and intelligent examination of the different structures of this region sometimes fail to reveal the source of the trouble. Surgeons who have a large amount of material at their command can probably recall such cases. The writer could mention many instances of this sort. In some of these patients a gastro-entrostomy has been performed and in others the gall bladder has been drained with the hope of relieving the condition. The persisting symptoms have led to an examination of the right kidney and the method here suggested has established the diagnosis. It is not the desire of the writer to cause the impression that these patients were not carefully examined by competent surgeons and medical men, or that the right kidney was not palpated at the operation, nor that the urine was not carefully examined, and Roentgen Ray plates made of the organ, but rather to point out that there are some patients suffering from indefinite symptoms in the right upper quadrant of the abdomen, the cause of which cannot be determined by the above methods of examination, and the only means by which the cause of the trouble can be revealed is ureter catheterization, functional measuring the size of the renal cavity and determining its condition by functional tests and by injecting it with a shadow casting fluid and recording its appearance on an X-Ray plate.

As this information is more generally accepted, there will be fewer misdirected operations.

Aside from the desirability of eliminating the kidney as a cause of symptoms directed to the right upper quadrant of the abdomen by making an X-Ray plate of the injected organ, valuable information may be gained regarding the internal arrangement of the kidney cavity and the ureter. Experience has taught us that subjective symptoms directed to the urinary system are often unreliable, that the findings by palpation must be very evident and coincide with the subjective symptoms to be of practical value, and that urinalysis without gross blood or pus is more or less speculated in value.

All this has led to the more general use of the cystoscope and ureter catheters to differentiate the relative conditions of the two kidneys; the many tests for determining the functional activity of the separate organs and the determining of the capacity and arrangement of the kidney cavity. From this data, a correct diagnosis may be made in

most instances. The value of the cystoscope and catheterization in locating disease of the urinary system is now well recognized; tests for determining the relative functional value of the separate kidneys before operation upon these organs is becoming more generally employed. It is the primary object of these remarks to direct attention to the rather newer procedure of obtaining a picture of the renal pelvis and ureters and to refer to the value of this method of kidney examination.

Previous to 1907 when Professor Voelcker of Heidelberg first made the radiographic demonstration of a solution of collargol injected into the kidney through a ureter catheter, our only idea of the capacity of the kidney pelvis was to be obtained by passing a ureter catheter into the kidney pelvis and noting the amount of fluid which could be injected into it before a renal colic was produced. This procedure first suggested by Kelly, while of value, is yet open to considerable error. If a small ureter catheter is used, a reflux of the fluid takes place around the catheter and the amount of fluid injected before the artificially produced renal colic takes place is not always a true measurement of the kidney capacity, and is seldom accurate; further, renal colic can be produced before the kidney is fully distended by a too rapid injection of the fluid. By using large ureter catheters through the Kelly tube in the female, the ureter can be co occluded as to prevent a reflux of the injected fluid in most instances but the cystoscope used in the male seldom carries larger than a No. 7 catheter which is not sufficiently large to prevent extra catheter reflux. Recently the late Dr. Garcau had made a cystoscope carrying a single ureter catheter No. 11. Personal use of this instrument has shown that this catheter entirely occludes the ureter, but that it is occasionally difficult to make this catheter enter the urethral orifice. If one is to rely on the measurement of the capacity of the renal pelvis by the amount of fluid injected, this instrument, devised by Garcau, is the only one which is not open to error.

Valuable as the above-mentioned procedure may be, the best idea of the gross pathology of the upper urinary tract is to be obtained by radiography of the ureter and kidneys injected with a shadow casting solution. This latter procedure not only allows us to determine the amount of fluid which the upper urinary tract will contain before an artificial renal colic is produced, but the radiogram shows the internal arrangement of the kidney.

The study of many plates made for the writer by Dr. Percy Brown, the Roentgen Ray Dept. of the Boston City Hospital and the Long Island Hospital, and the examination of plates belonging to other men, especially the large collection of Dr. W. F. Braasch of the Mayo clinic,

leads to the belief that this procedure is of the greatest value in demonstrating the following conditions: (1) The normal kidney pelvis. (2) The differentiation of extra renal shadows; e. g., gall-stones shadows overlying the right kidney and phliobliths. (3) The differentiation of abdominal tumors; e. g., of the liver, pancreas and retro-peritoneal nodes. (4) Localization of shadows within the kidney; e. g., in the kidney pelvis, a calix or in the parenchama. (5) The amount of dilation of the kidney pelvis; e. g., hydro nephrosis and pyonephrosis. (6) The condition of the calices and pyramids; e. g., the obliteration of the calices and encroachment upon the renal pelvis by kidney tumor growth; e. g., the destruction of the pyramids by a destructive disease such as tuberculosis. (7) Congenital deformities of the kidney. (8) The position of the outlet of the ureter from the kidney pelvis; e. g., draining the bottom of the kidney pelvis is located high so that there is a residual urine constantly in the kidney. (9) The condition of the ureters; e. g., dilated above a point of obstruction such as a stricture or impacted calculus; the position of a kink producing a hydronephrosis as in a movable kidney.

In closing, it is hoped that if the methods of examination referred to are already being used I may be pardoned for dwelling upon them and if they are not, that they may be in the future.

THE ALCOHOLIC PSYCHOSES.

BY DR. F. C. TYSON, ASST. SUPT. BANGOR STATE HOSPITAL.

The alcoholic psychoses represent a special group of toxic mental disorders, in which alcohol, invariably in the form of chronic drinking, produces a fairly typical, clinical symptomatic picture. It is a well established fact that alcohol plays an important etiological role in the production of other psychoses, and appreciating this fact, we must closely restrict the alcoholic group to those cases in which alcohol on a basis of chronic alcoholism, has produced a definite and characteristic mental disorder.

In order to discuss the alcoholic psychoses intelligently, one must get clearly in mind just what clinical conditions are included in the alcoholic group and, as the chief source of difficulty is encountered in estimating the influence which alcohol has upon the development of other mental disorders, the relation of alcohol to other groups will be briefly considered.

Chronic alcoholics may have excitements which cannot be differentiated from excitements occurring in individuals who do not drink alcohol; therefore, these excitements should be classified with the manic-depressive type rather than with the alcoholic mental disorders. Chronic alcoholics may, also, have depressions, and frequently attacks of excitement or depression may occur after the use of alcohol has been discontinued. It would seem that some attacks of manic-depressive insanity are brought about by alcoholic excesses and also modified by features purely alcoholic in character. Occasionally, manic-depressive cases have typical alcoholic attacks.

The relation of certain chronic alcoholic conditions to general paralysis is often so close that a differential diagnosis cannot be made except upon the subsequent clinical history and in the establishment of syphilis by laboratory tests with the cerebro-spinal fluid and blood serum. Chronic alcoholics may present certain physical disturbances; as tremors, ataxia, absence or exaggeration of tendon reflexes, unequal and sluggish pupils, defects in speech and handwriting, and a mental condition resembling in many respects general paralysis.

The relation of alcohol and its influence as an etiological factor in the development of dementia præcox, has lately received considerable attention from a number of prominent psycho-analysts who have demonstrated that certain cases of chronic alcoholism in which a chronic hallucinatory state develops after prolonged and excessive use of alcohol, show a dementia præcox-like psychosis. This psychosis, in addition to the persistence of hallucinations, is characterized by fantastic delusions and prominent sexual trends, accompanied by ideas of control, mind reading, and electrical influence. Thought shows varying degrees of incoherence with peculiar expressions and neologisms. The differential diagnosis of these conditions from dementia præcox is very difficult and is determined largely by the fact that they develop suddenly after one or more attacks of alcoholic delirium or acute hallucinosis, and the anamnesis does not reveal evidences of any dementia præcox-like traits in the make up of the individual.

In this brief consideration of the relation of alcohol to many psychoses other than the alcoholic psychoses proper, one can appreciate the fact that alcohol is an important etiological factor among others in causing various mental disturbances and great care and discretion must be used in differentiating between the pure alcoholic psychoses and those psychoses where the influence of alcohol is so much in evidence. It is important also, from a social as well as from a scientific point of view, because we need more accurate statistics upon which to base proper estimates regarding the effects and the frequency in which alcoholic mental disturbances occur in the community.

The tendency among a certain group of scientific men, as a result of recent studies into the mechanisms of chronic alcoholic mental disorders is to minimize the influence of alcohol as an etiological factor and to maintain that alcohol is incidental only to the development of the psychosis. It is essential, then, in order to obtain a clear conception of the toxic mental disorders, to isolate the alcoholic psychosis in pure forms because in them we see the clearest reaction to definite toxic influences.

THE OCCURRENCE OF ALCOHOLIC INSANITY.

The frequency in which alcoholic insanity occurs in the community is of interest and the following tabulation shows the percentage of alcoholic insanity among 800 admissions, exclusive of transfers, to the Bangor State Hospital for the past five years.

<i>Year</i>	<i>Men</i>	<i>Women</i>
1908	12.1%	.0%
1909	13.9%	.0%
1910	19.3%	1.1%
1911	8.4%	1.4%
1912	13.4%	1.3%

The cases admitted were committed almost exclusively from five eastern counties of the State of Maine. Of the 60 cases of alcoholic insanity, forty-seven were from cities and thirteen from rural or village environment. The percentage of alcoholic insanity appears rather large, especially from the cities, considering the attempt of the State to prohibit the sale of intoxicating liquors by constitutional amendment.

CLINICAL FORMS.

The following tabulation shows the different clinical forms, as designated by Bonhoeffer and Kræpelin, under which the alcoholic psychoses appeared in sixty cases during the past five years.

<i>Typical Alcoholic Group</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Acute alcoholic hallucinosis,	29	1	30
Delirious and confused states,	5	1	6
Korsakoff's psychoses,	3	0	3
<i>Atypical Alcoholic Group.</i>			
Chronic alcoholic hallucinosis,	12	0	12
Paranoid states,	3	1	4
Delusions of jealousy,	2	0	2
Deteriorations,	3	0	3
	<hr/> 57	<hr/> 3	<hr/> 60

ACUTE ALCOHOLIC HALLUCINOSIS.

This table of clinical forms shows that acute alcoholic hallucinosis occurred in thirty, or one-half of the total cases, and in addition to being our most frequent form, is better known clinically, and has a more favorable prognosis than other forms of alcoholic insanity. An analysis of these cases shows that twenty-five were discharged as recovered, two as improved, and three remain in the hospital. In regard to frequency of attacks, eight cases had two or more, each definite and resulting in complete recovery. In regard to admissions, four cases were admitted twice and another three times in five years. The whole duration of the recovered cases varied from two to six months.

Clinically, acute alcoholic hallucinosis presents a definite and characteristic picture. The onset is usually rapid but occasionally abrupt. A mild depression may occupy the interval after the patient has stopped drinking, and the onset of the hallucinations. This invariably occurs in cases of rapid onset, and varies from a few days to two weeks. In those cases where the onset is abrupt, the interval of depression must necessarily be very short. Fear and silent brooding immediately precede or occur coincidentally with the advent of hallucinations of hearing. Depressive ideas and delusions persecutory in nature, become fairly well systematized as the psychosis progresses. Fear and anxiety are prominent features throughout the active stage of the psychosis. The sensorium usually remains clear and orientation and memory undisturbed, very rarely does delirium tremens precede the attack and shade off into an acute alcoholic hallucinosis. Hallucinations of hearing are the most prominent of disturbances of perception, and appear suddenly in the form of voices that are nearly always threatening and condemnatory in character. The hallucinations often develop on a basis of extreme anxiety or irritableness, and a tendency to become startled by unexpected sounds.

The patients hear that they are to be killed, or are taunted by vile epithets; that they are condemned, and consequently fear their souls are lost.

The voices come from all directions — under the doors, through ventilators, through the windows and wireless telephones. They are very clear and distinct during the height of the illness, but become indistinct at the end of the illness, as they were at the beginning. Frequently many voices are mingled together, as though coming from a mob, among which different voices can be distinguished. Sometimes there is a mixture of good and bad voices, some offering encouragement and help, while others are derisive and condemnatory.

Hallucinations of sight are not much in evidence except when

there is more or less clouding of consciousness. Hallucinations of taste and smell are rarely present, and when much in evidence, the prognosis is unfavorable and the duration more prolonged. Subjective sensations, in the form of numbness, tingling and formication on various parts of the body are constant sensory phenomena. These sensory disturbances are frequently interpreted as due to electricity, and the delusion of electrical control is formed.

Disturbances in conduct are due to fear, which accounts largely for the activity, alertness and apprehension. They have a constant dread of impending danger, fear for their lives, and frequently offer themselves up to the police, or seek seclusion in protected places. During this period of fear, they are apt to turn upon and assault their would-be persecutors, or attempt suicide.

The stream of thought, as a rule, is coherent, and the memory is unimpaired except during the time when delirious features are present. Physically, tremors and sensory disturbances are fairly constant. The prognosis in practically all of the cases is good and recovery progresses gradually. The duration varies and it would seem that the more sudden and abrupt the onset and severity of the reaction, the shorter will be the duration. The prognosis is nearly always good for the first, and in a number of cases observed, for several subsequent attacks. The following cases, briefly abstracted are illustrative and typical of acute alcoholic hallucinosis.

Type 1. — A cook and waiter, aged 38. Father alcoholic. Was accustomed to drink freely of beer and whiskey for the past twenty years, indulged in sprees, was often intoxicated and inclined to be garrulous and pugnacious when drinking, lost various positions through his habits, but was capable and efficient when sober. Three weeks before admission and after a prolonged drinking bout, he heard vague voices speaking disrespectfully of himself and wife; later, the voices called him bad names, and he thought he saw people at his window who were watching him. He thought the Democrats were trying to buy his vote because he had become a Republican; they accused him through the voices, or being a ward heeler; taunted him for deserting his old party and plotted to get rid of him by making him out insane. Suddenly, he became alarmed, and barricaded himself in his house because the chief of police, who threatened to knock his head off, worried him. He shouted for help and tried to hire another officer to protect him. He suspected his food was poisoned but did not taste anything wrong in it. He became more frightened and active and on the way to the hospital he conversed freely with men in other coaches of the train through a little instrument which they carried in their pockets, who promised to release him from the officers for \$200. He

was capable of receiving the messages because his body was charged with electricity. Through this telephone he was advised by his friends and his priest to take the Keely cure.

On admission, he was extremely active and apprehensive, talked freely and was anxious to have his trouble explained. He had active auditory hallucinations, conversed with the Governor and other State officials besides having perfect communication with the doctors in the office. He was in constant fear of being killed by his enemies, whom he claimed shot "silverite" into him from the opposite end of the ward while the attendants held him. He heard the voices of his enemies calling him vulgar names and accusing him of all kinds of immoral acts. All of this persecution was the result of his opposition to his old party and affiliations with another party.

The mental condition gradually grew worse, the excitement increased, and at times he was frantic with fear. Many different voices came to him from all directions and he knew that all his former friends discussed his trouble. He heard that his wife was dead; that his children had been killed, and, in fact, all of his people had died, some of them in the hospital offices. He heard that his house and property had been destroyed by fire; at times, he ran about the ward shouting and gesticulating excitedly. He begged of the attendants to open the door and admit his little daughter. Frequently, he would stop, listen and whisper in reply to voices; after one of these whispering episodes, he exclaimed, "Thank God! that is good enough for me, the governor has promised to send soldiers to my relief." A few days later, the hallucinations began to fade, he became quiet, admitted his fears were false, and in four weeks after admission, he recovered with perfect insight.

Summary. — This case shows pure auditory hallucinations with a possibility of hallucinations of sight at the very beginning, but during the active stage of the psychosis only hallucinations of hearing were present. A few sensory disturbances were misinterpreted as electrical. The voices were condemnatory in character, the delusions persecutory, with slight attempt at systematization and great fear as the general affect. The sensorium remained clear, orientation perfect and memory unimpaired.

Type II. — Laborer, aged 46, drank excessively for many years, especially for two years before admission. He associated with men who drank and was accustomed to drink alcohol "split." He drank a quart of alcohol in 24 hours immediately preceding the onset of hallucinations, which occurred three weeks before admission. For several months while drinking steadily, he was depressed, thought he had no friends, cried frequently and acted strangely. When he became

hallucinated, he thought his house was charged with electricity, fancied he was the centre of a great deal of interest, became very frightened, secluded himself equipped with a knife and revolver and twice tried suicide. He was extremely depressed and apprehensive, thought various things were around him, heard voices in the wood-pile, complained of physical weakness and pain in his stomach, and thought he would die by choking. He had delusions that the Jews were after him, and as they crucified Christ, they were going to nail him to the cross. He heard the hammering and thought a cross was being prepared for him, took off his clothing so as to be prepared; later he became confused, saw lights and horses, heard bands, and frequently denuded himself; when the sensorium became clear again he quieted, showed more depression, and often spoke of dying. He had been without food for two days. On admission, he was sullen and apprehensive, assumed hallucinatory attitudes, became mute, would only shake his head indicating yes or no in response to questions. For six weeks he lay quietly in bed, but ever on the alert and mute. Sometimes he would point to his tongue and smile significantly but never speak. Then he began to whisper when urged to talk and said that he could not eat because of pains in his stomach and his intestines were closed at both ends. Six weeks after admission, he began to talk and showed that he had a perfect grasp upon surroundings, was oriented and had no impairment of memory. He said he was persecuted by the Masons because of secrets he had obtained, and the voices told him not to talk and not to eat. He said a power controlled him and ruled the house, he was commanded to do certain things by the voices, and he tried to co-operate. The voices which he recognized as Jewish, threatened to crucify him. They were always near him in the form of animals with human voices. These strange animals with human voices taunted him with vulgar remarks, and shouted, "Kill him!" "Kill him!" They applied electricity to his body through pins and needles. They caused gas to surround his body, and put blood and poison in his food. The voices reported his mind and revealed his past life. His conduct showed subdued excitement, hallucinatory attitudes and crying episodes. After four months, the hallucinations began to fade, but would recur occasionally with less fear reaction each time. Coincidentally, the delusions were given up, his conduct became orderly, and the emotional depression changed to cheerfulness. In five months after admission, recovery was complete with perfect insight.

Summary. — In this case a depression of several months preceded the onset of hallucinations, and was the first indication of an impending psychosis. Hallucinations of hearing, sight, taste, smell and sensation were present. The excitement and fear, while intense, was subdued

and expressed by emotional outbreaks. The prolonged duration, and severe reaction can undoubtedly be accounted for by the presence of hallucinations of taste and smell.

DELIRIOUS AND CONFUSED STATES.

Delirious and confused states constitute a small group which comes next in frequency of occurrence. Among these cases, pure forms of delirium tremens are rare. This is probably due to the fact that cases of delirium tremens having a short duration recover before commitment is necessary, the great majority of which are cared for in jails and other detention houses. The cases which we receive vary from mild states of confusion frequently observed in physiological intoxications to conditions where delirious features are prominent and continue longer than usual. When these conditions occur in middle-aged patients with more or less arterio sclerosis, the prognosis is uncertain.

The most prominent clinical features of this group are irregular drinking habits, sudden onset, hallucinations of sight, and occasionally hallucinations of the other senses, clouding of consciousness, disorientation, amnesic memory defects and confabulations. The prognosis varies; of six cases, three died from exhaustion, infection and broncho pneumonia, one improved and two recovered. In the recovered cases, delirious features more nearly approaching typical delirium tremens were present. The following case is illustrative of the essentially delirious types:

Type III.—A hospital attendant, aged 25, whose father was alcoholic, was a delicate child, went to sea when 16 years old, later entered the army, and was discharged for physical disability. He worked in various hospitals for the insane, was once discharged for sleeping on night duty and was generally inefficient. He drank irregularly, was often intoxicated and used morphine to aid in sobering up. Six months before admission, he drank excessively, became ill physically, and a week after giving up the liquor he became delirious, and had hallucinations of sight and hearing, saw snakes and animals, heard voices, became frightened and tried to jump through a window. This delirium lasted a few days, and consciousness became clear, but leaving him depressed, with a fear of dying, and a belief in electrical influences. He resumed the alcohol and morphine, and a few days before admission again became confused, delirious and extremely restless.

On admission, he was stuporous from sedatives and remained unconscious for nearly twenty-four hours. After regaining conscious-

ness, he resumed his former activity, showed fear, shouted, ran around the ward and looked under the bed for a man who was going to shoot him. He also showed an occupational delirium. The hallucinations were very active, he saw snakes, and all sorts of animals, fought them, pulled them from his neck, and made desperate efforts to get away from them; frequently, he would fix his attention upon some imaginary animal and stealthily try to get away. Consciousness was considerably clouded, orientation unclear, and the attention difficult to hold. The stream of thought was disconnected and at times incoherent. He replied to the voices by shouting approval to some, and denying the statements of others; as follows: "Kill him!" "Kill him!" or "Don't let them bluff you, Sam." "I am getting wise to this." "It's a d—— lie." Experimental hallucinations in the form of pictures, animals, flying sparks and landscape panoramas could be readily produced by making pressure with the fingers on the eyeballs. Illusions and misidentities occurred frequently. He imitated the movements of others and made signs with his fingers. The expression at times was serio-comic when certain hallucinations were present but most of the time it expressed fear and anxiety. Emotionally, the mood varied from boisterous laughter and playfulness to sullenness and irritability. Memory showed fabrications; for instance, he had eaten dinner in town a moment ago, had conversed with certain men, had just come from Chinatown, and was out all night having a good time. Retention was very poor, and the memory was amnesic for most of the experiences during the attack. Physically, he was poorly nourished, had abnormally dilated pupils which reacted promptly to light, and had exaggerated tendon reflexes and various paræsthesias.

The hallucinations disappeared suddenly after a long sleep at the end of four weeks. Consciousness became clear and recovery was complete with insight a week later.

Summary. — The principal clinical features of this case are the prolonged duration — about six weeks, and the predominance of hallucinations of sight over other sensory disturbances. The treatment of this case consisted in prolonged neutral baths which quieted the excitement and induced sleep.

KORSAKOFF'S PSYCHOSIS.

The Korsakoff or polyneuritic psychosis occurs very infrequently, only three male cases having been admitted. This psychosis occurs on a basis of chronic alcoholism and manifests itself as a delirium associated with polyneuritic disturbances. The onset is usually sudden, but previously there may have been a long period of irrita-

bility, restlessness, apathy, and a slowly developing memory weakness. The paralyzes may often occur after a fall or injury, up to which time polyneuritis may have been the only physical symptom. After such a fall or injury paralysis becomes evident, and the patient is no longer able to handle himself easily. At the beginning, the delirium is quite active and frequently associated with it are confusion, disorientation, irritability, and a state of mild anxiety or fear. Hallucinations of sight may persist after the other delirious features have subsided. Following the hallucinatory period, the characteristic mental state remains in the form of memory defects such as confabulations and impaired retention. Recent experiences and events are not retained after a lapse of a few moments. The remote past is also affected and the patient fills the memory gaps with false reminiscences and turns off inquiry by jokes and explanations.

The physical symptom complex shows muscular flabbiness and atrophy, with paralysis of the extensor muscles of the arms and legs which result in wrist and toe drop. The lines of expression in the face become smoothed out, tremors develop in the muscles around the mouth which has a patulous appearance. The extended tongue and fingers are tremulous and nystagmus is a constant symptom. Sharp pain is elicited on palpation over the deep nerve trunks. The patella and wrist reflexes are abolished, except in cases where there is no paralysis, in which case the reflexes are diminished. Irregular, unequal and sluggish pupils and speech difficulties may be present.

The prognosis is unfavorable, complete recovery being rare, mentally, there is lasting impairment of memory, emotional irritability and loss of initiative. Physically, the neuritis may clear up but some weakening of the muscles remains. In the vast majority of cases, alcohol is the only etiological factor, but other toxic poisons may produce the same result. The following case is typical of the Korsakoff or polyneuritic syndrome.

Type IV. — A successful contracting mason, aged 70, began to drink excessively as a young man, indulged in periodical sprees, carried his liquor well and flattered himself that no one knew he had been drinking. A few years before admission, he began to lose his business, could not handle important jobs, lost in efficiency, developed an increasing memory weakness, became irritable and restless, drank steadily and gave up work. He failed physically and complained of pains in his arms and legs. One day, while about to enter a street car, it started suddenly and he was thrown to the ground, being unable to release his grasp from the handrail on account of an old Dupuytren's contraction, which firmly flexed one of the fingers of his hand. After this fall, he was unable to handle himself, and a wrist and toe drop

soon developed, a mild delirium appeared, after which he was admitted to the hospital.

On admission, the physical examination showed a prematurely aged man, with flaccid atrophy of the leg and arm muscles, decided toe and wrist drop, steppage gait and extreme tenderness on palpation over the deep nerve trunks of the legs and arms. The facial expression was apathetic, the lines of expression smoothed out, the mouth patulous, and there were deep muscular fibrillations during conversation. The pupils were irregular but reacted promptly to light and a horizontal nystagmus was present. The senses of smell and taste were impaired neurologically, and numerous paræsthesias and anæsthesias were present. Mentally, he showed restlessness, stubbornness, and a tendency to repeat monotonously that he was not insane, but simply paralyzed in his arms and legs. He neglected his personal appearance, was forgetful, and could not retain recent experiences, but did not fabricate. He had numerous ill-founded and unsystemitized delusions about his property. Emotionally, he showed some irritability, but most of the time he was apathetic and good humored. He had no insight beyond some appreciation of his physical weakness. He died two years later from cirrhosis of the liver, pleurisy with effusion and atelectasis of the left lung.

Summary.—In this case, there is history of alcoholism for a long period. He gradually lost efficiency and developed a slowly progressing memory weakness. After a long period of inactivity and drinking, he developed an acute delirium, with polyneutis and paralysis after falling from a street car. When the delirious features subsided, he was left with paralytic residuals, and a characteristic mental state in the form of a memory defect, failure of retention, emotional apathy, with childish good humor and without insight.

CHRONIC ALCOHOLIC INSANITY.

The chronic forms of alcoholic insanity are in some respects atypical in comparison to those forms in which the toxic effects of alcohol act directly and immediately with the certainty of an experiment to produce characteristic mental and physical disturbances. It is evident that in the chronic forms, the toxicity of alcohol has long since been eliminated and other factors largely endogenous in character perpetuate the psychosis. The clinical forms which comprise the group known as chronic alcoholic insanity, are chronic alcoholic hallucinosis, paranoid states, states with delusions of jealousy and deteriorations. These chronic forms of alcoholic insanity are not well understood. While the clinical features have been carefully noted, the mechanisms at work in the development of the psychosis, have only recently re-

ceived the attention which their importance demands. The chronic hallucinatory states of alcoholic origin that have prominent paranoid and sexual trends, fantastic delusional formations, ideas of control, mind reading and electrical influence with disturbance of the stream of thought, which is characterized by incoherence and a tendency to coin peculiar phrases and new words, constitute an important group because of the similarity of these cases to dementia præcox. The following case illustrates a psychosis of apparent alcoholic origin which shows a dementia præcox like reaction.

Type V. Male, aged 31, an efficient wood worker in a furniture factory. He was healthy, both mentally and physically as a child, but as he grew into adult life, certain oddities of character developed in that he was inclined to shun the opposite sex and led an irregular sexual life. He found a great deal of pleasure in associating with his fellows and drinking with them. For a great many years, he used alcoholic liquors to excess. The duration of the psychosis before admission is very indefinite because he lived apart from his people, but for a number of months he showed depression and was inclined to keep by himself. Three months before the onset of hallucinations, he acted strangely and accused his fellow workmen of being against him. When he became hallucinated, he thought that his friends had poisoned his liquor, became greatly disturbed and violent, and after going home, he refused to take medicine because he thought it contained more "dope." Hallucinations at this time were very marked; he was depressed and fearful, talked of suicide, and heard voices constantly. On several occasions, he talked excitedly and stated that he was the victim of poison. He resisted when brought to the hospital because he thought that he was going to be operated upon. On admission, he was apprehensive and disturbed, cried a great deal and said; "I don't want my head cut off, Doctor. I want to live—I ain't a bad man." He said the voices told him his head would be cut off and placed on exhibition. He showed considerable emotional reaction, rolled violently in bed, and appeared to be in agony. Said he was charged with electricity and that enemies intended to kill him. He maintained that he was worth saving and that he had done nothing wrong to bring on such persecution. Consciousness was at all times clear, and he was perfectly oriented, but he was suspicious of every one, reticent, heard voices which appeared to be coming from a mob, but he could not distinguish any particular voice. He maintained that Spanish Fly was circulating in his blood, having been injected into him through his nose. He entertained the delusion that he had a "cascaret" fever, which shows an attempt to coin phrases. He thought that cascarets had been put into the bath tub and injected into him

with the intention of blowing him up. He soon developed peculiarities in conduct, showed a tendency to remain in certain fixed positions, talked to himself, became very irritable, cross and was inclined to strike. He objected to any attention which the attendants might give him for fear they would touch his body with their hands. He began to walk awkwardly and develop numerous stereotypes and mannerisms of facial expression and speech. His ideas were rather fantastic and unsystemitized but persecutory in nature. He showed numerous sexual trends, talked against women and thought they were trying to injure him and that they accused him of immoral acts. He has always failed to co-operate in an examination, and has remained constantly inaccessible. Hallucinations have persisted and are as much in evidence at the present time as they were when he was admitted. He showed fear of keys because he thought they conducted electricity to his body and he refrained from coming in contact with any piece of iron for the same reason. Stream of thought has become somewhat incoherent and he makes disconnected irrelevant statements without explanations. An analysis of the delusions and trends has been impossible because of his failure to co-operate. Hallucinatory attitudes have been common, and in reaction to evident hallucinations, he will laugh mirthlessly or scold for long periods at a time, using very profane language, and upon several occasions has made violent assaults upon the attendants.

Summary. — The early history of this case shows decided homosexual tendencies in a young man who found relief in associating with his fellows and drinking with them. Hallucinations developed suddenly on a basis of fear and more or less depression. The delusions are persecutory in nature and largely explanatory as a result of hallucinations. Sexual trends have been much in evidence. Associated with this, the stream of thought has become incoherent, disconnected and numerous mannerisms of speech and conduct developed. The differential diagnosis from dementia præcox is difficult, but the onset was more sudden and a previous history of alcoholic excesses evidently produced an acute hallucinosis which became chronic, and the psychosis has many features which we are inclined to attribute to alcohol.

While decided homo sexual traits in the make-up of this patient account largely for his excesses in alcohol with his fellows, such traits cannot be considered as essentially a part of the dementia præcox make-up because these tendencies are often observed in otherwise normal individuals who never have a psychosis.

President. — Dr. Tyson's paper is now before you, gentlemen, for discussion.

Dr. Holt. — Recently I have had a case of this nature in which I was much interested. A gentleman came down from Boston — or from some place in Massachusetts, and he came to me with a case of optic neuritis — his vision reduced to less than 1/100. I gave him some treatment, and while I was out of town he came down to Old Orchard, and was around there some — he had practically become delirious and had hallucinations and they had landed him at the St. Barnabas Hospital, with two special nurses, who were supposed to look after him, and then they sent for me. I went out and got Dr. Witherle to go with me. We asked him how he came to be out there at St. Barnabas, and he said he came down here from Boston and then he went on rambling, and told quite a story about an experience he had had with a woman, and a lot of unreasonable stuff. We asked him why he did not have the woman arrested, but he said he did not know her name, and continued to ramble on. After watching him for a while, Dr. Witherle thought he ought to be committed to an asylum he was in such condition, but we treated him, and looked after him as well as we could, and he began to respond, and he has been practically all right ever since.

Yesterday I had a man who came into the office for treatment for his eyes, and he wanted some glasses. I was questioning him in regard to his habits, and he did not give me much satisfaction for a time, but I kept on and finally he admitted that he drank a good deal of whiskey. He lived in another city and I was giving him a letter to the doctor in his home place, and he wanted me specially not to mention that he drank whiskey. He said his reputation was good there and he wanted me to be sure and not mention it in the letter I was sending to the doctor there. I agreed not to mention that he drank whiskey in the letter I was writing for him to take to the doctor, but I did not tell him that I would not say anything about it in a letter I wrote to the doctor later, and from which I thought he would take the hint and be prepared to treat the man accordingly.

You will notice a little nervousness or something of the sort — you can't exactly describe it, but it immediately leads us to believe that they use alcohol. Very often at first they will deny it, but usually admit it finally and we sometimes find that they take quite a good deal of liquor, and this was the fact in this case. He admitted that he drank quite a good deal of alcohol. He had been doctoring for this trouble for a year, and he got relief in two weeks.

Dr. Sewell. — It seems to me that there are two points that should be emphasized in every alcoholic psychosis that comes before a physician. One is that alcohol may be responsible for the condition, and the other is that alcohol may only be a symptom occurring from the

real psychosis. It would be well to act on the basis that alcohol is the cause where the history is prominent and treat the patient for such a condition, then, it seems to me we would be less liable to make mistakes. I have one patient under treatment at the present time that illustrates how alcohol may simply be a symptom and not a cause. A woman thirty-eight years of age, who was treated for alcoholism, until the case finally showed an absolute dementia. That is a case where alcohol is more a symptom than a cause. I have another case of a young man at the Psychopathic Hospital in Boston—a young man with various hallucinations, and we treated him for alcoholism and he recovered right away, although his case did not appear any more like it in the beginning than the other I have quoted. So in matters of this kind we are liable to be easily misled in deciding upon these alcoholic cases.

Dr. Miller. — I think Dr. Tyson has presented a very interesting and instructive paper both from a general standpoint, and from the more technical as well. They are, however, at Bangor in rather a better position to judge these things than we are, because they get more cases — they get more alcoholic cases than we get in this part of the State; they have a good many more every year than we have at Augusta. I think our highest percentage has been less than ten in the past few years.

I was interested in the report as brought out by Dr. Tyson and Dr. Sellew, as to alcohol being a factor in certain instances and in others only a symptom. I recall one case where I don't think it would have fooled any of us. The man was affected with syphilis and he came into the hospital with conditions which seemed like alcoholism. Physical symptoms which looked like a chronic case of alcoholism with the hallucinations and all attending symptoms, and his hallucinations ran along the line evidently that he was a victim of general paralysis — which was — by the way, largely caused by alcoholic delirium which had become chronic. We find this condition very frequently in cases of syphilis I have discovered, and the manner of treating these cases varies considerably. I was extremely sorry not to have heard all of Dr. Tyson's paper, for it was exceedingly interesting.

President. — The paper will now return to Dr. Tyson for further discussion.

Dr. Miller's objection to the term Korsakoff's Psychosis is well taken but for reasons of identification I preferred to use it rather than the designation, "chronic alcoholic delirium," which he prefers. The psychosis is essentially a chronic alcoholic delirium with polyneuritis and was first brought into prominence by Korsakoff, a Russian physician.

The cases reported by Dr. Holt, while unclassified as to the form of psychosis, were undoubtedly cases of alcoholic etiology, and illustrate the importance of a skillful examination of the eyes in all alcoholic conditions.

REFERENCES:

Kræpelin: Clinical Psychiatry.

G. H. Kirby: Report, Dep't Clinical Psychiatry, Manhattan State Hospital, 1910-1911.

W. C. Garvin: Acute Alcoholic Hallucinosi, American Journal of of Insanity, April, 1910.

“ “ Chronic Paranoid Dementia following Acute Alcoholic Hallucinosi, State Hospital Bulletin, N. Y., November, 1912.

H. W. Mitchell: Alcoholism and the Alcoholic Psychoses, in the Modern Treatment of Nervous and Mental Diseases, Vol. I.

Caesarean Section under Spinal Anaesthesia.

The British Medical Journal for May 3 of the current year contains very interesting details of an operation for Cæsarean section under spinal anæsthesia. The patient, a primipara, aged 26, was brought into the wards of Westminster Hospital, London, in December, and as she had an enlarged heart and was slightly cyanosed and dyspnoëic, the Cæsarean section was advised, for the safety of the mother. The operation was performed February 8th, after preliminary hypodermatic introduction of scopolamine and a subsequent spinal injection of 10 cg. of stovaine and 0.0075 M. G. of strychnia hydrochloride between the 12th dorsal and first lumbar vertebræ. The operation was completed in half an hour, two hours later the patient could move her legs, and a complete and uneventful recovery was obtained, with safety, both to mother and child.

An apparent advantage of the spinal anæsthesia consisted in the extreme relaxation of the abdominal walls, so that the uterus could be dealt with through a small incision.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. G. A. NEAL, Bar Harbor.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

DR. A. L. JONES, Old Orchard.

Editorial Comment.

President's Address.

Attention is called to the address of the President in the August issue of the Journal and to the recommendations which he makes.

Under the head of medical legislation he advises certain changes in the law of medical registration, notably that the wording of Section 16, Chapter 17 be changed from "or any other method of healing if no poisonous or dangerous drugs are employed" to "or any other method of healing if no drugs are employed." So that the words "poisonous" and "dangerous" shall be omitted altogether. A bill to this effect failed of passage in the last legislature, but the members of the Maine Medical Association should see to it that if the bill is introduced at the next legislature, pressure should be brought to bear upon the legislation to insure its passage.

Under the head of care of the insane he recommends that more attention be given to "Mental Hygiene" by which term conservation of mental health is meant. Following out this idea he advises the establishment of a committee whose duty it shall be to gather information relative to the causes of insanity, particularly in this State, and to recommend means for promoting mental hygiene. He also calls attention to the desirability of looking after the insane who for one reason or another have been discharged from the asylums.

Allusion is made to the fate of two bills relating to the insane, the first for the admission to the hospitals of voluntary patients, and the second for emergency commitments. Both failed of passage though

endorsed by the Maine Medical Association. This need not and ought not to happen again if the members of the Association live up to their responsibilities.

In a few well chosen words the President alludes to that comparatively new office amongst us, the School Physician, and the importance and responsibility of his duties.

As to the Medical Journal, he advises a greater number of original articles, fuller reports of the doings of County Societies and a more varied collection of news and notes.

The ever burning question of Venereal diseases is touched upon and the teaching of sexual hygiene to the young recommended. Then follows a recommendation that all right minded persons will applaud, viz: that those contemplating matrimony should be required to furnish certificates that they are free from venereal disease. Incidentally he calls attention to the existence of the committee on venereal diseases of the Maine Medical Association and calls upon all members to support it.

Under the head of tuberculosis he urges that physicians teach the public the importance of uniting with the medical profession in urging upon the legislature the making of such appropriations as are necessary to establish, equip, and maintain Sanatoria to be devoted exclusively to the treatment of this disease.

These are all timely topics and it is to be hoped that some good may come from bringing them forward at this time.

It may be noted in passing that although the bill relating to medical registration failed to pass the last legislature, the chances are that a new one will be presented to the next legislature. The whole subject has been placed in the hands of a new committee chosen by the House of Delegates.

Fee-Splitting Bill.

We note from the Wisconsin Medical Journal that an anti-fee splitting bill has been placed on the Statute Books of that State. The following is a copy of the bill:

"To create section 4431b of the statutes and to define and punish fee-splitting by physicians and surgeons.

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. There is added to the statutes a new section to read: Section 4431b. 1. Any physician or surgeon who shall claim or demand and collect and receive any money or other thing of value as compensation for his professional services in treating or operating

upon a patient who was induced or advised by another physician or surgeon to submit to such treatment or operation, and who shall have previously paid or delivered, or shall thereafter pay or deliver, any money or other consideration to such other physician or surgeon or his agent, as compensation for such inducement or advice, or as compensation for assistance in the case, shall be guilty of a criminal fraud and upon a conviction thereof shall be punished by a fine of not more than one hundred dollars or by imprisonment in the county jail not exceeding six months. Such conviction shall operate also as an annulment of the license held by the convicted person to practice as such physician or surgeon.

2. Any physician or surgeon, not a citizen of Wisconsin, who shall in any adjoining State treat or operate upon a citizen of Wisconsin, and who shall have previously paid or delivered, or shall thereafter pay or deliver, any money or other thing of value to another physician or surgeon as compensation for inducing or advising such patient to submit to such treatment or operation, or as compensation for assistance in the case, is forbidden to practice medicine or surgery within this State or to participate in this State with other physicians and surgeons in consultations. Every violation of this subsection shall be a misdemeanor punishable by a fine or imprisonment as prescribed in subsection one.

3. All persecutions under this section shall be in the circuit court. Section 2. This act takes effect when published.

Iowa City on Fee Splitting.

Iowa City, October 13, 1911. My Dear Sir:—In a number of medical journals recently and in the public press, the professors of the medical college are charged with the splitting of fees. In other words, they are charged with the dividing of fees which they receive in some cases with the physicians who bring the cases to them. After some effort, I have not been able to find the authority for such rumors. But the question raised is so vital that we cannot allow it to pass unnoticed.

For your information, therefore, I write to say that, first, at a recent meeting of the staff of the medical college, unanimous action was taken condemning such practices on the part of any one officially connected with the medical college; second, that the Iowa State Board of Education by special action has adopted this attitude of the Medical Staff as a law applicable throughout the University.

The division of fees is non-professional and unworthy. In order now that there may be no misunderstanding in the future in this

matter, I am sending a copy of this letter to every officer of the Medical College, of the Homeopathic Medical College, and of the College of Dentistry. The issue is clear, and is not to be clouded by any technicalities whatsoever. The professional conduct of all officers concerned must be right both in fact and in semblance of fact.

The honor involved in this matter concerns all of us. I ask, therefore, that you signify to me in writing your acceptance of this regulation designed to stop the practice of the "division of fees," if such practice exists in the university.

I am faithfully yours,

(Signed) JOHN G. BOWMAN.

Addressed to V. S. Traynor, M. D., President of Iowa Medical Society by the President of the State University of Iowa.

Lodge Practice.

In the June issue of the New York Journal of Medicine we find an editorial, "Lodge Practice in its relation to Qualifications for Membership," which represents briefly the position of the county societies of that State with three applicants for membership. These men were vouched for by prominent men in their respective communities, but the Board of Censors were informed that they were what is called "ten cent" doctors. Thinking they might be willing to give up lodge work they requested them to appear before the Board.

The question which confronted the Board was two-fold. First, the advisability of allowing men, continuing to do this lodge practice, to be admitted to membership in the county society and secondly, whether the State society could afford to offer a defence to any member who received so small a compensation for his services that he necessarily did careless work and would be open to suits for mal-practice.

In view of the fact that this question was raised in the House of Delegates in our last session and discussed quite generally, it would suggest that with a Medical Defense fund we could add one more lever towards eliminating this undesirable work.]

The Meaning of the Termination "Pathy."

Does "pathy" mean a disease or a system of treatment? It has lately been proposed to call Caisson disease, "æropathy." But the termination "pathy" has so long and so exclusively been used in medicine to signify a system of treatment, that confusion is sure to result if words terminating in this way are to be construed in two different senses. "Caisson disease" is plain; "æropathy" may mean air disease, or air treatment, and is obscure, and ought not to attain a foothold in medical nomenclature.

Motor Car Electric Head Lights.

These valuable illuminators are receiving the attention of government officials abroad, owing to endless complaints of their dazzling effect upon the vision of travellers along the streets and highways. They are, indeed, unpleasant to meet with at night, when driving, walking, cycling or motoring in the opposite direction. But it is difficult to see what can be done effectually in the matter, for cars must be lit to throw light on their own path, and electric lights are convenient and effective. The long and short of it is, that people on foot must keep out of the way, motorists and others must go slow, and go carefully, for motor cars are a necessity and a convenience at night such as can not be legislated off the road simply because a few people are occasionally incommoded and dazzled. Give and take is the rule of life and of the highway.

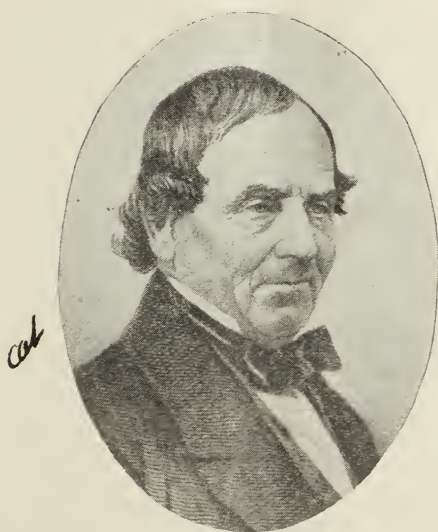
A Cardiac Sign in Cancer.

Dr. Gordon of the Devon and Exeter, England Hospital called attention nine years ago, and four years later, and now once more emphasizes a curious cardiac condition which he claims is indicative of cancer.

The sign consists in a remarkable diminution of the cardiac dullness in the recumbent position as determined by digital percussion. In the normal adult that dullness begins about the third costal cartilage, reaches rightward to the mid-sternal line, and measures across about 3 to $3\frac{1}{2}$ inches at the level of the fifth costal cartilage. In cancer patients who show dullness, it begins above, about the fourth or fifth costal cartilage, has its right margin $\frac{1}{2}$ inch or a full inch to the left of the mid-sternal line and measures across less than 2 inches at the level of the fifth costal cartilage. Often it measures less than 1 inch across, and often there is no dullness at all.

A long list of cases is appended to the paper, to be found in the British Medical for May 31, 1913. The conclusions are: That the sign is of practical value. That if present, where cancer is possible, the diagnosis of cancer should only be rejected after careful thought. That if absent in what may be early cancer, little stress should be laid on its absence. That if absent in what must be, if cancer at all, a late case of it, its absence strengthens the likelihood of the absence of the disease.

If thymol is useless as a medicine, according to some authorities, it is at all events useful in preserving furs and wools of all sorts.



DR. USHER PARSONS—U. S. N.

September 10, 1813—September 10, 1913.

A Centennial Remembrance of a Famous Battle, and of a Famous Surgeon from Maine.

One hundred years ago on the tenth of September, 1813, Commodore Perry and his brave officers and men defeated a British fleet at the Battle of Lake Erie. It was an epoch-making contest, and the magazines and papers of today are lauding the heroic acts of Perry and his men. But not a word have I so far heard, or seen, of equally heroic deeds accomplished on that self same day by Dr. Parsons, a man from Maine and the Surgeon of Perry's fleet! Yet, during that bloody combat he attended without any other assistance than that afforded by ordinary sailors, 117 wounded officers and men, 21 of whom were almost instantly killed, and 96 of whom were treated and recovered.

In the absence, so far, of any recent account of the work performed by Dr. Parsons upon that memorable occasion, it is proper that some notice should be taken of the occurrence in the Maine Medical Journal upon the observation of its centennial.

Usher Parsons was born in Alfred, Maine, in 1788, obtained a little education in the village schools, and then, being ambitious, went to Kennebunkport, and later on to Portland where, as a clerk in a shop, he earned money to begin the study of medicine. He rode around in the practice of Dr. Abiel Hall of Alfred, then studied with Dr. Al-

exander Ramsay, an eccentric anatomist and surgeon who has established a school for medical instruction in the obscure village of Fryeburg. Young Parsons next made his way to Boston where he continued medicine with Dr. John C. Warren, the leading surgeon of that era.

With the outbreak of the War of 1812, Dr. Parsons, as he was called, though still without a degree, obtained a license to practice from the Massachusetts Medical Society, and then walked from Boston to Portland and back, hunting for a position as ship's surgeon on a privateer, but all in vain. He happened, then, to call in at Dover, New Hampshire, where a political friend obtained for him an appointment as surgeon's mate in the navy. Armed with this commission, he applied for the Frigate "Adams," but found that she had sailed from Boston, whereupon he went to Rhode Island and volunteered for a secret expedition to the West. Arriving in Buffalo, he obtained a position in a hospital for the winter, and when Commodore Perry arrived in June, 1813, young Parsons became his immediate favorite, so that, when the fleet was ready to leave Put in Bay, September 10th, 1813, Parsons, in the absence of all of his superior officers in medicine, was made fleet surgeon, and ordered to the "Lawrence." During the entire bloody combat, he had sole charge, with a few uneducated apprentices, of all the wounded. The surgeon's operating room was a small, low studded space above the level of the water, and so exposed to the fire of the enemy that no less than six cannon balls passed through it during the battle, whilst innumerable bullets were steadily throwing wooden splinters in all directions. One officer had just left the care of Dr. Parsons, with a tourniquet on his arm, when a cannon ball passed along and killed the officer instantaneously. Through ruptures in the deck above, also, blood was all day trickling down upon Dr. Parsons and his assistants. Altogether, it was a place to try men's hearts, but the young surgeon, just 25 years of age, stood to his work throughout the entire affair. Upon the following day, the English surgeons came to his assistance, after attending to their own wounded.

Immediately afterward, Dr. Parsons was promoted to a full surgency for bravery under fire, and for skillful treatment of the wounded. He then continued in the navy for some years, and enjoyed unequalled opportunities abroad for seeing the famous surgeons of Europe. He attended Decatur in his duel with Barron, and remained credited to Maine as surgeon in the navy, but upon his resignation from the service he settled in Providence, Rhode Island, for life. He did not obtain a degree until 1818, and then lectured at Brown and Dartmouth Medical schools. He also composed a remarkable book

entitled "The Ship's Doctor," long unrivalled for use by our merchant marine, and a very able "Life of Sir William Pepperell." He carried off the Boylston prize, many a time and oft. Amongst his very numerous medical papers of briefer length, I mention one in which he suggested Intra Venous Medication at a time when that was a rarity indeed.

Dr. Parsons was repeatedly president of the Rhode Island Medical Society and Vice President of the American Medical Society, whilst his name honored the membership of societies innumerable. In brief, Dr. Usher Parsons, through his long, useful and laborious life as a capable physician, skillful surgeon, and delightful writer, continued to exhibit to the medical world that same zeal, skill, and activity, which he first exhibited to the world at the Battle of Lake Erie, one hundred years ago, September 10th, 1813. J. A. S.

Necrology.

CHARLES WALLACE PRICE.

Dr. Price, one of our oldest members, died April 25, 1913, after a culmination of long continued illness. He was the son of Charles Price of Boston, born there August 8, 1844 and as his father died early he was taken to Richmond by relatives when a mere child. He went to sea before the mast, when very young, and in 1860 was shipwrecked on the coast of Patagonia but miraculously rescued and brought back to Maine. Immediately upon reaching home, he enlisted for the Civil War but was returned invalided in 1863, after the termination of the Peninsular Campaign, as it is historically known. As soon as he recovered strength, he enlisted in the navy, served in several naval combats, and was so brave at the battle of Fort Fisher in 1865, that he received later on a medal, of which he was exceedingly proud, for bravery and meritorious conduct under fire.

After various enterprises on land, he entered heartily into the study of medicine and obtained his degree at the Medical School of Maine in 1875.

He practiced for some little time in Bath, and then his roving disposition again attacking him, he moved to the Nevada gold hills, practiced there, and then came to Richmond, where he practiced thirty years in all, and then retired, wearied with age.

He was a member of this Association and of the American Medical Association. He married Miss Albina Colbath, who with a son now practicing medicine in Richmond, survives him. J. A. S.

WILLIAM COWIE.

Dr. William Cowie, one of the useful members of our Association, died August 4, 1912, at the Paine Hospital in Bangor, in spite of an apparently successful operation for appendicitis in the previous June. He rallied completely from the operative shock, was doing finely and seemed on the road to entire recovery when other complications ensued, and despite the best of care, he succumbed to phlebitis and septicæmia. He was one of the leading practitioners in Piscataquis county, and was the son of Alexander McKenzie Cowie and Ann McDonnell, his wife. Born in Montreal, August 8, 1869, he was educated medically at Toronto and later in the Medical Department of McGill University, where he obtained his degree in 1898. He then served as interne at the Montreal General Hospital, and later on was for two years a ship's surgeon on one of the Cunarders, sailing to and fro on the Atlantic.

Soon wearying of sea life, he settled at Lowelltown in the northern part of Franklin county and then moved to Guilford in 1902 and practiced there the remainder of his life. He married Miss Clara Maud Rand of Parkman and is survived by her and by a daughter.

Dr. Cowie possessed an excellent working medical and literary library, was a clever practitioner, but very quiet and exceedingly reserved as a man so that hardly any characteristics beyond the facts here baldly stated can be discovered concerning his medical career.

J. A. S.

EDWARD MARINA SMALL.

Dr. Small for several years Assistant Surgeon and Surgeon in the United States Revenue Marine Hospital in Eastport, Maine, died Saturday, April 9, 1913, after a long illness from cardiac disease. He was born in Eastport in 1847, (the exact day I have in vain attempted to obtain from his nearest relations) and after an ordinary common school education began to study medicine with that sterling practitioner Dr. Babb of the same city. Dr. Small obtained his degree in medicine from the Jefferson Medical College in Philadelphia about 1870. He practiced first in Pembroke, Maine, not far from Eastport, then removed to New York City, where he obtained a lucrative business, and finally returned to his place of birth in 1897 and practiced there the remainder of his life. He was a good physician, did considerable minor surgery, was a very conversational, witty and brilliant talker, and enjoyed a good laugh, even at his own expense. He was also a man very prominent in Masonic and friendly circles, and is survived by a widow, whose maiden name and family have never been elucidated in spite of innumerable efforts.

J. A. S.

Vol. IV — No. 1.

Corrections on Pages 1471 - 1476.

Page 1471.

I have had something to do with the matter of the osteopath practitioners in Massachusetts, and I have been *thinking* on that subject quite constantly for the past several years.

While the law called for but one Board, it *allows only three members of any one school of medicine or society* on that Board, so we had three regulars, two homeopaths, and two eclectics.

Page 1472.

When they had passed the examination, and some of them passed very creditable examinations, *better in anatomy than some of the graduates from our best schools*, they were registered just the same as any one else who passed the examination.

There was an osteopath who was *very well educated*, and when he had completed his work along that line, he afterwards took a medical course at Dartmouth, so that now he is a regularly educated physician.

Page 1473.

He (meaning the osteopathic member) tells the osteopaths that they want to be able to recognize when some regular doctor gives the patient an overdose, that they want to know what the outcome of such a case would be, and be able to take care of it.

Page 1474.

But, going back a little ways, eighty-five to eighty-nine per cent of the *non-graduates* failed.

Page 1475.

We consolidate as much as we can too, but the Board has paid in nearly ten thousand dollars *during its entire existence, about eighteen years.*

Page 1475.

Twenty dollars but they can take two more examinations if they wish.

Page 1476.

Why just think of having a man like Dr. Edsall, who spoke to you yesterday, come into your State desiring to practice medicine *and being obliged to take a medical examination.*

It hardly seems possible, but Japan furnishes some ten thousand suicides yearly.

Review of Current Literature.

Therapeutic Gazette, January 15, 1913.

Scarlet Red in Eye.

ARTICLE BY J. ALLEN, M. D., D. P. H.

The Article appearing in the Therapeutic Gazette by Dr. Nance, who testified to the value of Scarlet Red in eye cases of various kinds but more particularly in low grade affections of the cornea. Dr. Allen has been using it in the form of one per cent ointment, using vaselin or equal parts of vaselin and lanolin for a base in the low grade corneal conditions and considers it more satisfactory than anything which he has heretofore used.

He has also used a two to four per cent solution for abrasion upon the lid. In his opinion it seems to stimulate the epithelial growth and to hasten regeneration of the denuded cornea.

He spoke of a case of wide-spread rodent ulcer, in the radical removal of which there was great loss of skin tissue. The application of scarlet red ointment assisted the process of healing and thus materially lessened the area uncovered by skin.

Again it has been used in the granulating of postaural wounds in acute mastoid disease. It evidently could be used in any condition of a granulated wound.

A minute portion is placed on the conjunctival surface of the everted lower lid; then a pad is applied to the eye and secured with a bandage. This is repeated once daily or every other day and the use of atropine or other remedies must be carried out if indicated. It is noted that there has been a little irritation in a few cases, which has been evidenced either by a little localized erythema or by slight lacrimation, but no patients have complained of pain or marked discomfort. His one injunction is that it shall be prepared fresh for each case.

F. Y. G.

Adenoid and Tonsillary Suggestions.

Stuart of Birmingham, England, proposes that all enlarged tonsils and adenoids shall be treated by the X-Rays and reports several instances in which marked improvement followed their use. Even if total absorption of the growths is not obtained, sufficient space is generally promoted to satisfy good breathing and aeration of the nasopharynx. A hard tube is used, the rays are filtered, and a half Sabourad dose allowed to pass through any given area of skin. The rays are applied laterally, the anticathode to the tube being above and behind the angle of the jaw; the head is so placed that the rays sweep in front of the vertebral column and posterior pharyngeal wall.

Book Review.

Progressive Medicine, Vol. 14, No. 4, takes up Diseases of the Digestive Tract and Allied Organs, the Liver, Pancreas and Peritoneum; Diseases of the Kidneys; Genito-Urinary Diseases; Surgery of the Extremities, Shock, Anesthesia, Infections, Fractures and Dislocations and Tumors; and Practical Therapeutic Referendum.

Vol. 15, No. 1, is devoted to Surgery of the Head, Neck and Thorax; Infectious Diseases, Including Acute Rheumatism, Croupous Pneumonia, and Influenza; Diseases of Children; Rhinology and Laryngology; Otolology. Among the list of contributors we find such men as John Bradford, Edward P. Davis, Arthur B. Duel, Edward Jackson, and other prominent men.

Vol. 15, No. 2, takes up Hernia; Surgery of the Abdomen, exclusive of Hernia; Gynecology; Diseases of the Blood. Diathetic and Metabolic Diseases; Diseases of the Spleen, Thyroid Gland, Nutrition and the Lymphatic System; and Ophthalmology.

Progressive Medicine has stood for all that its name implies in that it represents through its various well-known authors all that is new in medicine and surgery.

Lea & Febiger are the publishers.

F. Y. G.

Another English surgeon, Asby, is proposing to treat adenoid patients with a lymphatic gland extract made in the same fashion as the familiar thyroid extract. The results are declared to be promising. According to the theory of their action, adenoids are an attempt on the part of nature to supply deficiencies in other lymphoid tissues of the body, by enlarging these lymphoid glands in the naso-pharynx.

== **GLENELLIS SANITARIUM** ==

(ESTABLISHED 1905)

The location in the wooded highlands of the Rangeley Lake region is especially beneficial to a large number of non-surgical conditions

SPECIAL ATTENTION IS GIVEN TO CASES OF

Functional Nervous Trouble and a limited number of Alcoholics and other Drug habitues are received

Address **FRANK E. LESLIE, M. D.**
ANDOVER, OXFORD COUNTY, MAINE

Personal News and Notes.

Dr. J. A. Spalding leaves September 4th for a vacation of two weeks. While away, he will visit Fairfield, N. Y., where his grandfather taught medicine something over a hundred years ago in the Stone Lecture Hall and Chemical Building which was erected in his honor by the Medical School.

Dr. and Mrs. E. G. Abbott have returned home after two months sojourn in Europe.

Dr. Chas. F. Traynor of Biddeford has been appointed medical examiner for York County to succeed Dr. D. W. Wentworth of Sanford.

Dr. D. E. Doloff and family of Biddeford have been visiting for a while in Monroe, Dr. Dolloff's native town.

The next meeting of the Clinical Congress of the Surgeons of North America will be held at Chicago, Ill., November 10-15, 1913.

Dr. A. W. Haskell has returned after four months study in Germany after spending one year as assistant to Dr. Knapp of New York. He has prepared to limit his practice to diseases of the eye, nose, and throat.

Col. Edwin M. Fuller, for 40 years a practicing physician and surgeon in Bath, and for 20 years identified with the medical corps of the State Militia, died of blood poisoning, August 8, aged 63 years. Col. Fuller was past grand commander of the grand commandery of Masons in Maine and was past president of the Maine Medical Association and had been in both branches of the city government. Two sons and a daughter survive him.

YOU WANT A LARGER AND BETTER JOURNAL?

**You can have it by writing our advertisers: — "I saw
your Ad. in our State Journal."**

✎ FAVOR THOSE WHO FAVOR US ✎

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

OCT., 1913.

No. 3

*SYMPOSIUM: FRACTURES.

CONSERVATIVE TREATMENT OF COMPOUND FRACTURES.

BY DR. HIRAM HUNT, OF GREENVILLE.

It is unnecessary to call attention to the importance of this subject to all general practitioners, for I imagine that the majority of cases of compound fractures come primarily under their care. They are serious cases. While the simple fracture may result in deformity or impaired usefulness, the compound fracture may involve the loss of the limb, or even loss of life.

According to its frequency, there is hardly any other surgical emergency that comes to the care of the general practitioner so serious as the compound fracture.

Stimson gives two varieties, direct and indirect, according to whether they are caused by direct or indirect violence. The direct violence generally causes a more extensive injury to the soft parts, and very often greater injury to the bone or bones.

The typical indirect compound fracture has a cut in the skin from one-fourth to two and one-half inches long, with or without the bone protruding. The care of this kind of fracture is what we have under consideration. To talk of conservative treatment of a compound fracture where a leg had been caught in a cog gear and grease and clothing ground into the tissues, the bones shattered, skin torn for two-thirds the circumference of the leg, would be unreasonable. It

* Papers read at the Portland Session of the Maine Medical Association, July 3-4, 1913.

would be equally unreasonable to talk of conservative treatment in the later stage of a septic fracture, where pus is burrowing everywhere, and the integrity of the limb or the life of the patient is at stake. So we limit our conservative treatment to the early treatment of the fracture without great injury to the soft parts and before the fracture is infected.

The word "conservative" in this connection is not original. In Volume VI of Keen's Surgery, under compound fractures, Eisendrath says: "The general attitude of the most progressive is that conservatism should be our key note in the treatment of such an injury." And Pringle, a London author, in "Fractures and Their Treatment," says: "The second method of treating open fractures is that which has come into prominence in the practice of many surgeons in recent years, and is termed by them the "Conservative Method." And so we are justified in the use of the word conservatism, as applied to the early treatment of compound fractures. And what is this conservative treatment?

Dr. J. B. Murphy perhaps gives as good a description of this method as any. Dr. Murphy says: "The first step is the primary preparation. You should never wash, scrub, handle or touch the lacerated surfaces of bone or soft parts.

Soak the entire field with the hair on, with the ordinary Tr. Iodine. If bone protrudes, replace it with as little handling as possible. Do not put any instrument into the wound. Do not explore the wound with your finger. Remove any foreign substances on the surface of the wound. Smooth and sew up the cut without drainage, and put on a five per cent moist carbolic dressing."

Dr. Murphy says every compound fracture must be converted into a simple fracture, regardless of deformity, and says:

"Never wire a compound fracture. Never plate a compound fracture. Never put a foreign body into a compound fracture." Further he says: "Unfortunate enthusiasts are inserting foreign bodies into compound fractures, and are reaping a large per cent of unfortunate results." And again, "We have been taking them out for thirty years and the number that has healed in, put in primarily, in my observation, in that time, can be counted on the fingers of one hand." This is the so-called conservative treatment, and in order to make the distinction clear between this treatment and the other, let us quote from Professor Mumford, who teaches in his surgery as follows: "In making the primary dressing, the surgeon should operate with the patient anæsthetized; he should wash the leg with soap and water, and scrub it with gauze sponges and the nail brush, after the hair of the whole leg has been carefully shaved away. Then he completes

his cleansing of the parts by scrubbing the leg with liquid chlorinated soda, which removes effectually all grease and oily dirt.

The surgeon then turns his attention to the damaged soft parts. He enlarges the wound sufficiently to permit of a digital exploration of the deeper tissues; he washes out the clots and detritus with a long sustained irrigation of hot salt solution; he checks hemorrhage and completes his cleansing by soaking the parts in hydrogen dioxide, and washing that away finally with another long douche of hot salt solution. If the bones are badly splintered, he removes the loose fragments; if the larger fragments are not brought easily into apposition, he secures them with silver wire; he then inserts a small drain deep in the leg, applies an ordinary dry aseptic dressing to the outer parts, and puts up the leg in a permanent posterior wire splint."

Could any two methods of treatment be more widely different? And yet Dr. Mumford says: "The surgeon or the assistant who first sees and dresses a compound fracture of the leg, is responsible for the life of the patient, because it rests with this attendant, by his primary care to secure asepsis, wound healing, and bone union; or it remains for him by his inefficiency to lead the patient into a condition which shall conduce to infection of the wound, with a possible loss of limb or life." Granted that this responsibility rests on the unfortunate medical man who dresses the fracture first, what authority shall he accept, what rule shall he follow?

I have quoted from Dr. Murphy and Dr. Mumford, because they are well recognized authorities, but they are not alone in advocating their respective methods.

Dr. Eisendrath in Keen's Surgery, says: "Tr. of Iodine may be employed instead of the ordinary method of disinfection with green soap, etc. Many surgeons are employing this method in preference to the more complicated methods. It is certainly much simpler and involves far less risk of carrying dirt from the surface into the wound, and thus infecting the fracture seat. The majority of compound fractures are not infected, and often only become so through meddling interference."

Pringle, in his book, says: "Statistics have been published from some of the large clinics to show that the results obtained by this method are much better, than by the free opening up and thorough cleaning of the wound."

Good authorities claim that in the presence of iodine the development of tetanus bacilli is much less likely, than under other forms of treatment.

Lane, in a paper read while in this country last fall, in reference

to compound fractures, said: "Personally, if I can obtain a reasonable approximation of fragments, I prefer to treat this form of fracture by splints, or some similar fixation apparatus."

Stimson says: "The less the wound is handled the better; though exceptionally, it may be advisable to explore the wound to help in reduction, or to remove fragments or to secure a torn vessel."

Prof. Martin, of the University of Pennsylvania, says: "It is commonly accepted today that compound fractures should as a rule be opened, cleansed and neatly apposed with some retentive appliance."

Dr. M. L. Harris of Chicago, says: "It was formerly thought to be necessary to shave the parts and then to scrub thoroughly with soap and water and alcohol and bichlorid, etc. But now we know that this is about the best way of infecting the wound that could be employed. The washing and scrubbing simply washes dirt into the wound, and injures the vitality of the cells already exposed, thus diminishing their resistance, and does not get rid of the germs which are present. It has been found to be much better in this class of cases not to attempt to do any washing, and, above all, not to apply any water or soap to the parts. If gross dirt can be seen in the wound, it should be picked or wiped out, and the whole area thoroughly painted with the tincture of iodine. If the ends of the bones have been exposed, they should be wiped off and painted with the iodine before being returned. After thoroughly painting with the iodine, and allowing it to dry, the parts should be carefully adjusted as well as possible, and a dressing and splints applied. Too much praise cannot be given the iodine method when it is properly used, as it is without doubt the simplest and the most valuable method of preparing the skin with which we are acquainted.

At the Alexian Brothers Hospital, where we have a large emergency service, and hence a great many compound fractures of all kinds, we have found the use of the tincture of iodine, in the manner mentioned, of the greatest value, and it is the regulation method of treating this class of cases."

There you have it. One authority says scrub and another says scrubbing is the worst thing possible. One says to use silver wire if required, to keep the bones quiet and in place. Another says never use any foreign substance. The conclusion I have arrived at is for the man in general practice to study both sides, and then formulate a rule for himself — adaptable to the different fractures and different surroundings.

My own rule is the conservative method: the free use of iodine

and as little handling as possible. Fortunately it is not given to the medical man outside of the large hospitals to care for a great number of compound fractures. But a record of over fifty cases will teach a man some few things.

One of the things I have learned is the necessity of extreme care in the handling of these cases; another thing is to leave the X-Ray alone until the compound has been converted into a simple fracture. Another thing is that it is not necessary to have the bones in automatically correct position in order to save a limb that is functionally all right.

I have had two indirect compound fractures that have become infected. The first was several years ago before iodine came into vogue.

A fracture of the femur with bone protruding. The man was hauled from the woods to a boarding house where I saw him twenty-four hours after the accident. Unassisted, in poor surroundings, I removed the clothing from around the wound, cleaned the wound as well as possible, and replaced the bone. I cannot tell if I was responsible for the infection that followed. I do know that today I would remove any clothing that was mixed up in the wound; coat the entire thigh wound and all with iodine; put on a clean dressing and wait until the man could be moved to some place where I could have assistance and better conditions, before attempting to replace the bone.

The second case was a fracture of the tibia; at the end of the first week the wound was looking well; no evidence of infection; but the X-Ray showed that the bones were not in good apposition. It was an oblique fracture and there was some overlapping. In my efforts to bring and retain the bones in closer apposition, the wound got infected. Had I left the leg alone, the bones would have united readily; the man would have had a leg functionally as good as the other, and he would have been spared months of suffering.

Dr. Jacobi, President of the American Medical Association, in his address at Minneapolis last month said: "We write too much and debate too little."

I hope I have not written too much. I hope you will not debate too little.

RADICAL TREATMENT.

By DR. W. C. PETERS, BANGOR, ME.

All cases of compound fracture should receive immediate attention unless the patient's general condition positively forbids. We must balance the chance of *shock* against *sepsis*, and postponement invites the latter in most cases. We should first institute a careful inquiry into the *history* of the injury. It is important to *know* whether the open lesion was caused by protrusion of the bone from within, by penetration of some object from without, or by *crushing*. Certain crushing injuries, such as those caused by car wheels, so completely destroy the blood supply, that *amputation* is necessary. This inquiry will also throw light upon the probable amount of dirt which has been carried into the wound; a fracture with a simple cut extending to the bone offers much less opportunity for infection than if the bone itself has protruded through skin and dirty clothing.

I shall not consider the question of temporary treatment because this really comes under the head of first aid to the injured, and if taken up at all in this symposium, will no doubt be included in Dr. Hunt's paper.

Compound fracture always calls for an anæsthetic, and, as a rule, diagnosis may well be postponed until we open up the wound. In most cases even the removal of the temporary dressing should be left until the patient is fully anæsthetised, for injuries are occasionally aggravated by the patient's struggles while taking ether. It is not safe to probe a compound fracture.

It is proper to assume that all compound fractures are infected, and one of the objects of the treatment is to convert the open, *infected* wound, into a *non-infected* one. Therefore the cleaning up process really becomes a part of the operation and should be personally superintended by the surgeon. A piece of sterile gauze should be held over the wound while the adjacent skin is washed with soap and water and chlorinated soda. The surrounding area should then be carefully shaved. The edges and outside surface of the wound itself may then be washed with clean soap and water, scissors and forceps being used to remove ragged edges of skin, also any blood clot and detritus within easy reach.

It is now time to carefully investigate the *interior* of the wound, and an irrigation of corrosive sublimate should be started, 1 to 15,000. Loose pieces of flesh and bone should be removed with instruments, and the assistant should move the limb in such a way as to allow the

irrigation to reach all parts of the wound. The object of proceeding thus cautiously is to wash everything out of and nothing into the wound. A very large quantity of fluid should be used, and in order to facilitate free access to every part, a slight enlargement of the wound may be necessary while the irrigating process is going on. When irrigation is complete, swab all the parts of the wound with ten per cent iodine.

At this point discard the few instruments which have been used during the cleaning up process, surround the part with clean sterile sheets, and enlarge the wound sufficiently to give room for whatever operation is necessary.

The actual *operative* treatment in compound fracture must necessarily vary with the location, character and extent of the injury. The action of the muscles is an important factor and may make it very difficult to hold the parts in good position. A spiral fracture requires careful handling and comminution complicates the treatment.

Firmly attached fragments may be left undisturbed, but if in doubt, it is best to remove them.

Of materials with which to unite the fracture, we may choose between *absorbable* material, such as cat-gut and kangaroo tendon, and *non-absorbable* such as silver wire, staples and bone plates. A good rule in the treatment of compound fracture is to introduce into the wound as little foreign matter as is consistent with fair approximation of the parts. It is often possible to maintain good position without any such help, and the experienced surgeon will frequently trust to his plaster of paris without any internal aid.

Some men maintain this should always be the procedure, and a secondary corrective operation be performed if necessary. But in hospital practice, it is wise to complete the treatment at the time of the initial operation, and this may be done in outside cases if there is opportunity for carrying out the details of thorough antiseptic treatment.

My favorite treatment is kangaroo tendon, and the heaviest kind used double will stand a tremendous strain, provided it is not pressed upon by sharp edges, but often silver wire or bone plates are *needed* to maintain good position.

My experience is that foreign material causes little trouble provided the wound remains clean, but I am equally convinced that non-absorbable material, especially bone plates, tend to delay union, and while I have used a great many of the latter, I am using less than formerly. I have removed but one bone plate, and that was done because it was in the way during a second operation. It was deeply covered by new growth and hard to get at. Screws become loose after

the first month, as do all staples and nails which penetrate the bone *marrow*. A spike driven through the trochanter, along the neck and into the head of the femur, will almost drop out when the skin is cut for its removal, seven or eight weeks after it is put in.

Specialists differ in their treatment of a certain *type* of compound fracture, viz.: the one where a sharp piece of bone protrudes through the skin, and quickly returns into the soft parts, leaving only a small wound. Nearly all such cases will do well if iodine is poured into this small opening, and the injury then treated as a simple fracture. But a few will be infected and do badly, and I prefer to open all in the first place. In a large percentage of compound fractures, the wound is open, the tissues dirty and certainly infected. These must *necessarily* be treated more radically.

Drainage. With the thorough treatment described, a fairly large percentage of fresh cases may be closed up without *drainage*. In many, a small rubber wick, with gauze inside, should be inserted down to the bone and removed the next day. Cases already septic, of course, require complete drainage and perhaps counter openings.

Splints. Plaster paris is the best material for most fresh cases, and a window will give opportunity for inspection or the removal of drains. Septic cases should be put on a wire splint, which will allow free access for dressing.

Post Operative. The cleanest cases usually have a temperature of a hundred (100) on the two days following operation, falling to normal during the next two or three. A subsequent rise calls for inspection.

A slight septic condition in the drained cases usually clears up without further operation, and while moderate sepsis delays union, it seldom prevents it. Secondary amputation should be a very rare procedure.

Since the introduction of X-Ray, too much emphasis has been placed on absolute position, and too little on the relation of the fracture to adjacent joints. Appearance concerns the patient but little in comparison with his desire for a useful limb, and we should bear in mind that impairment of function is a more serious result than mere change in shape. Be sure of a good line and the proper relation of the fracture to neighboring joints, and the result may be considered good, even though X-Ray shows considerable mal position.

In closing my plea for the so-called radical treatment (which is *really conservative* to the last degree) let me say, that in the hands of a careful surgeon, it yields splendid results, while the less thorough method is not dependent upon the skill of the operator, but is rather a matter of luck. Nevertheless, every case of compound fracture calls for special consideration on the part of the surgeon, and no matter how much we may differ in practice, we must not say that other methods are any less proper than our own.

THE TREATMENT OF FRACTURES WITH LANE PLATES.

BY DR. A. D. SAWYER, FORT FAIRFIELD, ME.

Until within the past few years there had been very little improvement in treating fractures in a century or more, notwithstanding the great strides that have been made in every line of surgical work. The old writers were as keen and the methods of treatment by splints as good, as that given by modern teachers, with the single exception of the introduction of the use of plaster of paris. The indiscriminate use of that material in all fractures has been disastrous in many cases, and it is a question whether or not, on the whole, there has been a gain in functional results since it came into use. In many fractures it is unquestionably the ideal splint when properly applied, and at the proper time.

We meet with a class of fractures in which any non-operative treatment will give a large per cent of deformities and poor functional results. Several years ago, I read a paper before the Aroostook County Medical Association, advocating the open treatment of certain fractures, particularly in cases where the bones were kept in apposition with difficulty where there was more or less deformity, and in all cases where union had failed. In nearly all of these operations it was a secondary procedure, resorted to only after non-operative treatment had failed, and when a good result was very much less likely to be obtained, than if early operation had been performed. Notwithstanding the crude method employed, which was cutting down and wiring the broken ends together, and the delay in performing it, the functional and anatomical results were good in a very large per cent of the cases. In fact there was a good bony union in every case. Suppuration resulted in several cases and yet it was not found necessary to remove the wire afterward except in two instances.

To Dr. Arbuthnot Lane of London, we are indebted for perfecting a method, when properly performed and suitable material used, of relieving the surgeon of one of the greatest causes of anxiety which we are called upon to contend with. When we realize that more than ninety per cent of all mal-practice suits are brought on account of alleged ill treatment of fractures, and when we see so many deformities, continually reminding us of the inadequate use of splints in preventing them, Dr. Lane deserves the sincere gratitude of the surgeon in relieving our minds from the anxiety and costs of these suits, and in giving patients good useful limbs.

American surgeons have been a little slow in adopting his method, but, as he forcibly replied after they had criticised his paper quite severely at a meeting of the American Medical Association three years ago — "The X-Ray and the courts will compel you to adopt it whether you want to or not," which we shall certainly find to be true. There will be fractures near, and involving joints, that will result in deformity and incapacitate the unfortunate patient, but even in these cases the open treatment will give a much larger per cent of good anatomical and functional results, than can be obtained by any other plan of treatment.

No external appliance has ever been devised that will prevent more or less shortening and deformity in fractures of the femur, humerus, both bones of leg and forearm in a very large per cent of cases. There will be instances in which non-union will result, no matter what the treatment; but these will be very materially lessened when we cut down upon the fracture, dislodge soft tissues which may have gotten between the ends of the bones, bringing them in accurate apposition and securely plating them together.

Non-union, due to systematic disease or to malnutrition of the bone itself, will be exceedingly rare.

Why take the risk, the worry, the liability of a mal-practice suit, when it can be avoided by a sane, surgical procedure? In a large fleshy person, it is very difficult to tell when a fracture of the femur or humerus is successfully reduced, without the use of the X-Ray, or inspection of the bone through an open incision. At a country bedside where we are called to treat many of these fractures, the X-Ray is wholly impracticable. Even if we succeeded in reducing the fracture, what assurance have we that we can maintain the position by any external appliance? Muscular contractions, inevitable movements of the patient, will seriously preclude such a possibility. Why there are not more deformities and ununited fractures is a beautiful illustration of the goodness of nature to repair lacerated tissues and broken bones in spite of treatment.

While the use of the Lane plates is a safe, sure and efficient means of treating fractures, let no one take it up in a careless, hap-hazard manner. There is no operation requiring more careful attention to details, none more liable to infection which will jeopardize the result. With a full equipment of Lane's instruments, well tempered plates that will not bend or break under ordinary circumstances, and the most careful antiseptic precautions, there is no operation more satisfactory to surgeon and patient.

The operation should not be performed until five or six days after the receipt of the injury, because it has been shown that during

the first few days when there is an active inflammatory condition, infection is much more liable to occur.

When first called, put the limb up in as comfortable a position as possible and control the pain.

The day before operating, scrub the limb thoroughly with antiseptic soap and hot water. At the time of operation, use tincture iodine freely over all exposed surfaces. Use all the antiseptic precautions that you would in doing the most radical abdominal operation, always remembering that bone is much more susceptible to infection than the peritoneum or almost any tissue or organ within the body.

You will notice that all of Lane's bone instruments are long with long handles. He never touches the wound or the ends of the instruments that go into the wound, or allows anyone else to do so, even with gloved hands. The sponges should be handled with forceps and not with the hands. With a little practice, it is surprising how easily this operation can be done without touching the wound with anything except steel instruments that are strictly sterile, hence the chance of infection is almost nil, thus eliminating the greatest element of danger. The skin incision should be made sufficiently long to easily facilitate the work—not less than ten or twelve inches for the thigh. Sterile towels are clamped thoroughly to the skin, thus preventing sweat and all that goes with it from entering the wound. Extension is applied, while another, with the long forceps, grasps both ends of the bone which are firmly held in position, a suitable plate is applied and securely screwed down—no ligatures being used—skin brought together with metal clamps. Remove tourniquet, put up limb in coaptation splints—no extension being necessary.

Without strict attention to these details, your operation is liable to be a failure and thus bring it into disrepute.

In what class of fractures shall this method be employed? In answering this question, I will include all simple or comminuted fractures where there is displacement, shortening, and inability to keep the ends of the bones in perfect apposition by splints and extension. This will apply to nearly all fractures of femur, humerus, both bones of forearm and leg.

My experience with fractures of the femoral neck in the old has been that better results have been obtained without any treatment whatever. These patients do not stand the immovable position which splints necessitate. When left to themselves and allowed to move as much as they desire, they have been more comfortable and all have eventually been able to walk.

In compound fractures, Mr. Lane has the wound thoroughly cleansed and swabbed out with tincture iodine, put up in suitable splints and allowed to heal. Should there be deformity or shortening, he then operates the same as in simple fractures.

It was my privilege, last summer, to see Mr. Lane operate on quite a large number of fractures, both of recent cases and for old deformities. A brief consideration of four of them may be of interest.

Case 1. A boy twelve years of age received a fracture of lower third of femur, which was plated at the time. Nine weeks after, he fell again, fracturing the bone in the same place and breaking the plate. On cutting down, the plate was found to be as firm as when first applied. The force sufficient to break the bone and plate, did not loosen a single screw. The plate was removed and a much heavier one was applied at the same point.

Case II. A woman fifty-four years of age, nineteen months previously, sustained an intercapsular fracture of head of femur. She had remained helpless ever since. The doctor cut down, opened up the joint, grasped the head and put in two long screws through the shaft into the head of the bone, which firmly held it. I could not remain to ascertain the result, but he felt confident the operation would be successful.

Case III. A man thirty years of age had, two years prior to admission, sustained a compound fracture at about the middle of the shaft of femur. There was an angular deformity with three inches shortening. A large amount of callus was chiselled off—the bone separated by chisel and mallet. Two husky assistants were able to pull the limb out to its normal length, when a strong plate was applied, giving the man a perfect limb.

Case IV. A recent Potts' fracture in a rather heavy man, about forty years of age. The fibula was broken about two inches above malleolus, internal malleolus fractured, with separation of tibia and fibula. In this case three plates were used, one for each malleolus, and another to hold the bones together. With separation of tibia and fibula, and fracture of both malleoli, no external splint could have held them in accurate apposition. So much callus would have been thrown out that this patient would, undoubtedly, have been a cripple.

In fracture of patella, a fibrous union is the rule, when plaster and splints only are used. The open treatment, using a thin plate or wiring, should give firm, bony union. With the fragments of bone firmly held together and by frequently changing the position of limb—flexing and extending limb—a stiffened joint will be much less likely to occur. Keeping an inflamed knee in a fixed position six or eight weeks must favor ankylosis.

We have been prone to allow patients with a fractured thigh to walk on the limb too soon. A case treated several years ago, well illustrates this danger. The patient was a large, strong man. At the end of six weeks, the splint was removed and the limb was found to be straight with only one-half inch shortening, which was a flattering result in an oblique fracture. He got about with crutches, gradually increasing the weight upon the limb. I did not see him again until months afterwards, when there was found to be a bad bowing out of thigh, with three inches shortening.

Ten or twelve weeks should elapse before any weight is put upon the limb. A shorter time is not safe under any plan of treatment.

In plating the humerus, one should be very careful not to injure the musculo-spiral nerve. In one case, I worked down to it carefully and pushed it aside without injuring it, so far as I could observe, but during the healing process, scar tissue must have involved it in some way, as there was slight paralysis some time afterward.

In another case the patient was a very large man weighing over 250 pounds, fifty years of age. The humerus was broken very near the elbow joint. The fracture was reduced by an excellent surgeon of large experience, and put up in an appropriate splint. One week after the injury, I removed the splint and the arm appeared to be in very good position, but on cutting down to the bone, the lower fragment was not in contact with the upper at all. Any union would have been impossible. The ends of the bone were brought into perfect apposition by the use of Lane's long forceps, and a plate was applied. The lower fragment was so short that it would barely hold two screws. The man today has a good, useful arm.

The plates should be tested before using them. For want of this precaution, a good surgeon had a failure in a fracture of the femur in a child, which was brought to my attention not long since. There was an angular deformity with nearly two inches shortening. The plate was held firmly in position and there was good bony union, but the child had been allowed to walk too soon and the plate bent. A plate out of the same lot could easily be bent with the fingers. Such a plate is worthless, and the manufacturer ought to be prosecuted for selling them.

One should also observe that the thread is cut close to the head of the screw, otherwise it is liable to split the bones.

Many surgeons will delay operation until they have found, after treating the case by splints, that union has failed, or there is shortening and deformity. In looking over the report of the British Medical Association, I noticed that when the operation was resorted to as a

secondary measure, that in only sixty per cent was there a good functional result, and eighty-three per cent when done primarily. In Mr. Lane's cases failure is almost nil in primary operations.

This is a very important subject. When we look about and see so many deformities and cripples, it behooves us to wake up and render better service in the future than we have done in the past, in the treatment of these accidents. The time is not far distant when the courts will require us to perform this service, and justly. But that is a small incentive to do our duty, when compared with the discomfort and loss of earning capacity which these unfortunates have sustained through our lack of effort or skill to give them the best possible results from these injuries.

THE USE OF THE X-RAY IN FRACTURES.

BY F. W. LAMB, M. D., PORTLAND, ME.

Before the era of the X-Ray, our knowledge of fractures was based on the observations of many generations of surgeons who have handed down to us the following cardinal symptoms — deformity, preternatural mobility, crepitus, and loss of function. These signs and symptoms are established facts based on clinical knowledge, but, unfortunately, they do not manifest themselves in any given order and are not present in all cases.

Deformity, for example, is often deceptive, and may be due to swelling of the neighboring tissues, occurring at the time or subsequent to the injury. Many fractures, such as the greenstick, inter-articular, impacted and fissured varieties, show no deformity whatever. Much stress has been laid upon shortening, but many fractures do not show it. In regard to this symptom, I will mention a case I was asked to X-Ray a few years ago. In this instance, an injury at the upper third of the femur, there was no doubt of the fracture, the X-Ray was used merely as a check on the treatment. Apparently the fragments were in apposition, careful measurements showing no shortening. The X-Ray, however, showed considerable overlapping, and careful inquiry into the patient's past history brought out the fact that when a child

he suffered an injury to his other leg and since that time it had been about an inch shorter than its mate.

Preternatural mobility is also a sign of doubtful value, for it is absent in impacted, inter-articular and greenstick fractures. In an injury near a joint, it is difficult to say how much motion comes from the joint and how much from the supposed fracture.

The symptom, crepitus, that old stand by, is too often unreliable, for, as Cotton says, "Although the presence of bony crepitus may be said to prove fracture, whereas soft crepitus indicates injury to epiphyseal, or other cartilage, it is not always easy to obtain and may be closely simulated by some other conditions, as synovitis, or a rheumatoid joint. Also crepitus tells us little, or nothing of the variety of fracture or its location, for it is often transmitted the whole length of a long bone."

The diagnosis of many fractures by the older methods calls for a high degree of skill, and most of us have seen surgeons of undoubted ability unable to make a positive diagnosis, even with the use of an anæsthetic.

The use of the X-Ray as an aid to the diagnosis and treatment of fracture possesses many advantages over the manual examination. It is painless and obviates the necessity of waiting for the diminution of the swelling, or the removal of temporary splints or bandages. It gives us a perfect view of the part and enables us to tell the variety of fracture, its location and extent, the number and size of the fragments. It also shows their position, whether they are over-lapping or in good apposition. In the neighborhood of joints, it tells us whether we are dealing with a fracture or a dislocation, or both. This is very important, for a dislocation should be reduced at once.

The use of the X-Ray has also given us a different idea of the types of fractures; many supposed to be rare prove to be common, as comminuted colles fracture, fracture of the ulnar styloid and fracture of the bones of the carpus and tarsus.

Many fractures formerly supposed to be common are now hardly ever seen, such as fractures of the acromion and coranoid process of the ulnar. Fractures of the elbow in children, which were formerly classed as T-fractures, and fractures of the internal condyle do not occur, but are, in reality, super-condylar fractures or separations of one of the many epiphyses found there.

In speaking of fractures of the elbow, which I have found to be one of the most common injuries in children, I am reminded of an occurrence during my first month of X-Ray work, which taught me a lesson I have never forgotten. I was called by a well-known western surgeon to take an X-Ray of a child's elbow. The plate was exposed

and on development there was apparently a small fragment of bone separated from the humerus and displaced into the joint cavity. On examining the plate with the surgeon, I called his attention to the supposed fracture, but he failed to agree with me. After much discussion, a picture of the other elbow was taken and, much to my chagrin, the two plates were alike. Since then, I have always made it a rule in these injuries to get a view of the corresponding side for comparison.

There are several fractures which can be diagnosticated by the X-Ray only. These are crushing injuries of the carpus, tarsus, and metatarsals; fractures of the neck of the scapula, of the pelvis and spine; and some cases of hip-joint injury.

Among the rare conditions which have come under my observation was a fracture of the lesser trochanter of the femur. In this case, a boy about twelve years of age, while skating, was tripped by a playmate, and, in falling, felt something snap in his groin. Swelling, crepitus, shortening, all of the so-called cardinal signs of fracture were absent. The pain was very severe and was only relieved by putting the thigh in extreme flexion. An X-Ray showed the fracture and indicated the correct treatment.

In fractures of the spine, diagnosis is often very difficult, even by the aid of the X-Ray, and, although supposed to be rare, in my work as radiographer, I have seen several during the past few years, most of them in the cervical region, others in the dorsal and lumbar regions. Paralysis was present in only one case,—a fracture of the fifth cervical vertebra, and the patient had slight paralysis of the arms and hands. In another cervical case, a fracture was discovered which, had it not been recognized and the proper splint applied, might have caused death by displacement of the fragments.

In addition to the variety of injuries already mentioned, there is a class wherein a slight hurt is followed by severe pain and loss of function, in which for lack of better interpretation, a diagnosis of fracture is made although the cardinal signs are absent. This condition may indicate some disease of the bone hitherto unsuspected by the patient, but brought to light by the injury. An X-Ray should always be taken of these cases. The following case is illustrative: Mrs. D., age 40, complained of slight lameness in her shoulder as the result of a fall. A few days later, she again fell and again injured the same shoulder, whereupon the pain became intense and she was unable to raise the arm. There were no evidences of fracture or dislocation. The pain was, however, continuous and with the possibility of impacted fracture in mind, she was referred to me for an X-Ray about two weeks after the original injury. The plate gave no evidence of frac-

ture, but did show a marked diminution in density of the head of the humerus, indicating a diseased condition of the bone. An operation was performed and the cortex of the bone found to be of shell-like thinness, breaking upon the slightest pressure. The head of the humerus was practically a hollow shell, containing only a few dried blood clots. The cavity was curetted and allowed to heal by granulation.

There has been much discussion among surgeons in regard to the use of the X-Ray as a preliminary to the treatment of fractures. In the light of our present knowledge and, except in obscure conditions such as dislocations, complicating joint fractures and those involving possible litigation, the trend of opinion seems to be, to first make the diagnosis and reduce the fracture, then use the X-Ray to prove up your work and provide a permanent record. At the same time, if the X-Ray is available and the condition and finances of the patient permit, it is a self-evident fact that a fracture, with the number and position of its fragments made actually visible by means of an X-Ray picture, may be treated more accurately and skillfully than one concerning which one has no definite knowledge.

Of course, the routine use of the X-Ray is impracticable in many communities, but where it is accessible, by all means use it; especially if there is any doubt in your mind as to the position of the fragments. Oftentimes we are thus able to protect ourselves from mal-practice suits.

The best time to use the X-Ray to show the results of treatment is within two or three days after reduction, but a week or ten days may elapse. It is astonishing to find how firm a union has taken place in two weeks, but even then it is possible to correct a faulty reduction, although considerable force has to be employed.

Concerning X-Rays taken to show end results, and by end results, I mean the position of the parts after such time as is usual for complete recovery, it seems to me that unless some very obvious deformity is present that needs correcting, it is wiser not to have an X-Ray taken for the reason that even with perfect functional results the X-Ray may show malposition.

In closing, I would like to emphasize the following three factors, which in my opinion contribute largely to the successful use of the X-Ray.

First. In cases of injury to the extremities, insist upon two views, one antero-posterior, the other lateral, since oblique, greenstick and fissured fractures are not visible from all points of view.

Second. When in doubt, especially about injuries of the hip or elbow, insist on a picture of the normal side for comparison.

Third. All X-Rays are absolutely useless unless correctly interpreted. For this reason study the plate carefully with the radiographer, as the best results can only be obtained by combining his familiarity of X-Ray interpretation with your knowledge of fractures and the history of the case.

DISCUSSION:

PRESIDENT: These excellent papers are now open for discussion. Has anyone anything they wish to say on these important subjects?

DR. KING: These are certainly very interesting papers and I don't know whether or not I have anything to say in disagreement with the authors of them. The first two papers took up the consideration of compound fractures and the principles, which we should apply in the treatment of them, are the same principles which are applied in the treatment of wounds of every nature. The first is cleanliness and there seems to be a little difference of opinion as to how to procure cleanliness. Of course the use of soap and water is known to each of us and perhaps there is nothing better. We must remove all fat and antiseptic matters and all lacerated skin. Whether scrubbing with soap and water is the best way, may be an open question. Gasoline will dissolve the fat and is an excellent cleanser, as well as soap and water, while iodine is one of the best of the antiseptics, so with all these agents at our command, I see no reason why anyone should fail in this matter of cleanliness, nor can I see how he can avoid using antiseptics. I think one point in the use of iodine should be made more prominent than usual, and that is, that it is not only an antiseptic, but also an excitant to the cell activity. Now, in the repair and protection of wounds, whatever will excite those tissue cells induces activity and does its portion to aid the healing process. Then again, in the treatment of these cases, we should, of course, be very careful to remove all foreign bodies. I don't see how anybody can avoid the removal of all foreign substance, which may consist not only of parts of the clothing and outside matters, but loose fragments of tissue which have lost their vitality, and become foreign bodies. They should be carefully removed. Another thing to which we should not fail to give attention in connection with these compound fractures is the matter of perfect drainage. Be sure not to dam up the opening with a piece of gauze but see to it that the drainage is in good condition. Great care should be taken in that regard. The next thing to have our careful attention is to see that the tissues are brought into proper relations; in these compound fractures the bone has been broken and the muscles and tendons have been torn. A thorough search should be instituted and they should all be put into normal relations as much as possible. If we are careful in these particulars, the rest will follow naturally in most cases. We are simply using the same principles in the treatment of compound fractures that are applicable to the treatment of all wounds.

In regard to the use of the Lane plates in the treatment of fractures, as discussed by Dr. Sawyer, it is a very important point, and, as Dr. Sawyer has said, it requires extreme, perhaps extraordinary skill and care, and unless a man has extraordinary skill and care and has had experience in this treatment, he ought not to attempt to follow this method of treatment. The law requires simply ordinary skill and care, but if a case is treated in this manner and turns out badly, and later gets into court asking for damages, then the

question of damage is not on account of the treatment, but the jury is going to inquire whether the unfortunate result is due to the accident, or to the treatment which was used. Whether it be a compound fracture or a simple fracture, we are certainly adding risk to the patient. It seems to me that we ought not to enter into such formidable operations as cutting down and fastening the bones together in this manner unless we are prepared to undertake the task with *more* than ordinary skill and care.

DR. PETERS: I merely want to say that I think we should be very careful how we introduce foreign bodies into any wound—and of course the Lane plate is a foreign body—unless we are pretty sure of what the result is to be. We should make ourselves masters of the science before attempting to mend a simple fracture by introducing a Lane plate. We should be perfectly sure of the technique and results, it seems to me, before attempting the operation.

DR. STURGIS: I want to take only about two or three minutes of your time and that shall be largely in relation to the matter of cleansing the wound. I recall several cases I have treated. I remember many years ago—probably it was as many as thirty—I was called to see a patient who had fractured both bones of the left forearm at about the middle, by being thrown or falling upon a cog-wheel, or between two cog-wheels of a machine for rolling leather. The cogs had taken out part of the muscles and skin, and we got, not only a compound, but, a common fracture of the ulna and a simple fracture of the radius. That was in the early days of antiseptis, before we had heard as much about it as we now hear. I washed out the wound as best I knew how at that time, and dressed it—that is, I had a large open wound there with a part of the muscular tissue gone. I did the best I could in the way of dressing it with splints and got very good drainage, as good as was possible with the splints. The case went along and in perhaps two or three months the man made a fairly good recovery, save for the loss of the muscular tissue which had been taken out by the cogs, and which could not, of course, be replaced; but he made a very good recovery and had perfect use of the limb except in some ways, and we thought that was very satisfactory. There was a case which I tried to clean as best I could at that time and which terminated very well.

Some twenty years ago, I had a case of compound fracture of the tibia which was caused by a man being thrown from a carriage. He had on shoes—or rather he had on what we call a Congress boot, and, as he struck the ground, the tibia was fractured and protruded through the soft part of the flesh. It was a very bad case and there was a good deal of laceration. Under an anæsthetic, we examined the bone thoroughly, myself, Dr. Donovan and perhaps Drs. Hill and Oakes, I don't remember about that now. I have forgotten just who was with me, but I know we cleansed the wound as carefully as we knew how, I know that quite a lot of sand was driven into the lower end and upper fragment of the tibia, and then dressed it. It is a very difficult matter to dress so large an injury so that the dressing will remain in place, if any ordinary dressing is applied. Before putting on the dressing, I introduced a silver nail into the upper fragment and down into the lower end of the tibia or what was left of the tibia, cleansed the wound and stitched it up, giving it the best drainage possible. I then trimmed away the soft tissue and skin, and that man made a splendid recovery and the limb gives him no trouble. I should have said that I let that nail remain there only a few days until the several parts united and then I removed it entirely and put on the splints and he recovered

in about the same time you would expect a recovery from such an injury; it was only a short time. And so I believe that every case and each case that comes to the surgeon carries with it, to a certain extent, the conditions which are to guide him in regard to the method of treatment he must pursue. Of course we get the little simple fractures, and the fractures where the bone is sticking out through the skin, and a great variety of fractures where the injury is more or less severe, but as a whole, perhaps, this class of cases taxes the surgeon and gives him as much anxiety as any class of cases to which he is called.

DR. DONOVAN: Gentlemen, I do not intend to take your time by discussing matters of no particular consequence, or things which are well known to all of you, but if I am able to emphasize any little point which may be of use, I shall certainly feel repaid for taking a little time as I intend to do. About forty or forty-five years ago, I was called upon to attend to a broken leg. The tibia and fibula were both involved in simple fractures. I treated the limb to the best of my ability, kept it in good position, and no union followed. After about five weeks, I became anxious and had a consultation. We decided that it would be best to wait a while longer, but still, after doing so, there was no union. Accordingly another consultation was called and the treatment was advised to continue. I was young then, in practice, and I did not suspect the reason for this failure in the union, but, after waiting a while longer, we questioned the young man and found that he had syphilis. Whereupon we went about giving him syphilitic treatment promptly, and immediately brought about the looked-for union in the bones. I mention this so that the younger men present here may not forget that syphilitic difficulties are still liable to be the prevention of the normal union of broken bones. It has been my fortune to have seen quite a number of fractures. I have lived in a district where laborers have been perhaps particularly liable to accidents, and I have seen a good deal of the trouble growing out of broken bones, or fractures as we call them. I soon learned, as a young practitioner, that a very important point in the treatment of fractures, was, after securing good apposition of the parts, to make the patient comfortable. A splint bearing upon the bony part, entirely destroys the comfort and that makes it doubly hard for the patient and all who come in contact with him. A little care in padding the splints with elastic material — perhaps nothing is better than wool — will enable the patient to lie comfortably until bony union has been secured.

I have done the greater part of my work in fractures long before the X-Ray was known, and therefore have not had that advantage. I believe that the X-Ray under some circumstances may be deceptive, and should not be wholly depended upon, as in some cases, if this were done, the results would necessarily be bad. I do not mean to say that the use of the X-Ray is not perfectly proper, but we must not allow ourselves to become too dependent upon it. We should use the X-Ray to guide us in our manipulation in the sense of touch, but always with due apprehension, and barring it when it does not agree with other indications as to the union of the bone, provided these indications are normal and accurate. We know, of course, that bony points must be in apposition before we can expect a satisfactory union.

In my use of splints I have depended largely on plaster of paris in fractures, and for fractures of the leg I consider it the ideal treatment. In many cases of this nature it has been my custom to use Buck's extension with elevation at the foot of the bed, and so get counter extension. Now in regard to the

management of compound fractures, it has been my experience that the better way was to wash the wounds out as quickly and deeply as possible, as the men become deeply infected otherwise because of working around the grease and gurry of machinery; and again, the clothing, and perhaps some sand, is likely to have been introduced into the wound. This grit is one of the things I have had to deal with, and of course one has to be very careful in regard to these simple matters. I will refer here to the teaching of Dr. Murphy. I don't think he had these cases in mind, because he teaches that we must not introduce the fingers into the wound or any instruments more than is absolutely necessary in closing the wound. But in some of the cases I have had in mind it has been absolutely necessary to open up the wound and make it as clean as possible before attempting to do anything else and, if there were useless portions, trim them away. Then too, we must have good drainage, or we cannot expect good results. In regard to antiseptics, iodine is good, and I have also found that bichloride of mercury is powerful when properly used.

PRESIDENT: Any further discussion of the papers? If not they return to the authors in the order in which they came.

DR. HUNT: I don't know that I have anything further to offer. I might say that in cases of fracture where the bone is protruding or has been protruding and has gone back into place, it seems to me that under those conditions a man would have to be largely influenced in the matter of how to treat the case, by the surroundings under which he has to do the work. I imagine the greater percentage of compound fractures are treated outside of hospitals, and the question has to be, are you going by some other doctor's method, are you going by Dr. Murphy's method, or are you going to adopt some other method by Dr. Smith, Jones or somebody else? Are you going into an ordinary house or boarding house and do as you would do if you were in a hospital with all its facilities about you, or are you going to chisel off the bone, trim up the tissue and use some antiseptic, it may be iodine, and put on a clean dressing and leave the limb until you can get your patient into more favorable surroundings where you can do better work? I believe, and I am judging from my own experience, that I have done damage by attempting to do too much in that class of cases, and I believe if I had left them alone that they would have done better in the end. In order to make use of all the approved methods which are recommended by the various authorities, I believe we should have exceptionally good surroundings, and that means practically hospital surroundings, or something just as good. If you go to work and enlarge the wounds, putting in the finger and attempting to explore it and see the inside conditions—perhaps attempting to wash it out, and all that goes along with that process, as recommended by Dr. Mumford with his experience in handling these cases for quite a while, and you may not have his success, especially if the conditions under which you work are such as to hamper you somewhat, at best. These authorities have had the best of conditions usually under which to work, while many of us have to depend more or less upon the text books in a very large measure; we cannot get at Dr. Peters or Dr. Donovan or Dr. King every time we have a case. Dr. Murphy, with his great experience, recommends that we never explore and wash out these wounds; that we never put a finger or an instrument into a wound of compound fracture. I think we should be very careful how we go about enlarging a wound of this kind in order that we may get

into it to the more carefully explore it. In order to do this, I believe a man should have the best possible surroundings.

DR. PETERS: I have nothing further to add, Mr. President.

DR. SAWYER: I want to agree with Dr. King and Dr. Peters as to the use of the Lane plate and the careful attention that should be given to it. Where accidents have happened, I think it has been practically because of lack of attention. I used to lose a great deal of sleep in the treatment of fractures, but I use now in every case where it is possible, a Lane plate, and I do not lose a minute of sleep over the patient.

The International Congress of Medicine.

The seventeenth International Congress of Medicine which met in London, Aug. 6 to Aug. 12 was a colossal affair. Twenty-three different sections in session at the same time with each section presenting a list of speakers any one of which a man might, figuratively, be willing to break his neck to hear, attest in a measure, the mighty scope which modern international medical science has attained and made it a physical impossibility for any one reporter to give anything approaching a personal description of the event.

The great number of subjects considered, coupled with the fact that the very latest advances were outlined by men who represent the foremost workers along their respective lines, would make it a literary effort of no mean proportions to abstract, inasmuch as each essayist, with few exceptions, presented his subject in the language with which he was most familiar, naturally his native tongue, hence papers in English, French, German and Italian, with the discussions following were introduced at one sitting. If this failed to satisfy, a little Esperanto could be had on the side at no additional cost.

The medical profession of Great Britain, with their chosen officials, managed the administrative details of the Congress in a masterly fashion. Their painstaking efforts in arranging every detail of the program challenged the admiration of all for its simplicity and thoroughness. London opened every door of its hospitality. The government of Great Britain, Lord Mayor of London, princes, potentates and even the king vied with one another in presenting a social entertainment that it would be difficult, if not impossible to duplicate in any other city in the world. That this gladdened the heart of every British physician was easy to see and the fact that the great lights of the medical profession are honored the world over was again substantially and conclusively attested.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Editorial Comment.

The Pulmotor and the Respirator.

The medical profession and humanity in general have lately received as a boon in emergencies two new and apparently equally effective apparatuses for the resuscitation of persons apparently drowned, or poisoned or injured by high power electrical currents, or injured otherwise in such a way as to impair respiration, or over-anæsthetised during some surgical operation. It is well worth while for those in the practice of medicine to bear these valuable adjuncts constantly in mind, so that in cases of emergency they can be called for and found always ready.

A good description of the pulmotor has already appeared in the public press, so that further mention in that direction is needless. It might be urged, however, that the name is most unfortunate. For, as the apparatus moves the lungs, it should more properly be called a PULMOMOTOR, whereas from the present name, it suggests the mere pulling of something, to make the persons breathe.

The respirator, an entirely new apparatus, is fully described in the New York Medical Journal for August 13, 1913, and seems to be worth mentioning side by side with the other apparatus already in vogue. Dr. A. E. Tompkins, the inventor, objected to the pulmotor because it was too heavy to be carried by one person, because only one kind of oxygenated cylinders could be attached, because when the pressure got too low the apparatus failed to work, because the cylinders had to be returned to one firm only, for refilling, and finally, because in his opinion oxygen was objectionable in producing artificial

respiration in comparison with pure air. However these objections may weigh against the pulmotor, it is well worth bearing in mind, that a respirator, as invented by Dr. Tompkins would be well worth having in some hospital in Maine. It is light in weight (not more than ten pounds) it does not depend on any one brand of oxygen, it can be easily operated by hand or foot, either of which can be changed instantly without losing any time so precious for the patient's recovery, the cost of keeping in order is a mere trifle, there is no expense for oxygen or for refilling the cylinders, and finally, fresh air alone is used.

Another point in the obtaining and maintenance of one each of these two valuable apparatuses in Maine would be to ascertain by experimental use in cases of emergency which of the two was the most trustworthy.

An Official Organizer.

It may be interesting to some of the members to note the following recommendations by the President of the South Carolina Medical Association, at the 65th annual meeting, April 15, 1913.

(1) That a member of this Association be elected and known as Organizer of the S. C. M. A., this officer to be especially selected with a view to his special fitness for this office. That his duties be clearly defined and to consist, first, of setting aside sufficient time each year to visit every county medical society in this State and at a specially called meeting of the county society to give an address, with the object of getting a thorough and complete county organization upon a broad plane, and to organize county medical societies where none are now in existence. That the Organizer be paid his travelling expenses and a reasonable compensation while he is actually engaged in organization work for the State Medical Association.

(2) In order to keep the Organizer in touch fraternally with the Medical Association of North Carolina, Georgia, and Virginia, that he be appointed delegate to the annual meetings of each one of these States and that his actual expenses be paid, and that he be appointed and be made ex-officio one of the delegates to the House of Delegates of the American Medical Association, with his expenses paid.

(3) That the City of Columbia be selected as the permanent meeting place of this Association and that the Association bear its own expenses, to relieve the local members of the profession and the citizens of the burden of expense of entertainment.

An adoption of such a plan might prove very beneficial in any State Society and particularly with Maine where the membership of our State Society includes only a little over 50% of the physicians practicing in the State of Maine.

Co-operation Among Physicians.

A recent editorial in one of our daily local papers complained of citizens patronizing out of town firms and buying of them silks, satins, hats, gloves and gowns at prices even higher than they brought in the very city in which they lived. This is, however, precisely the same idea that prevails and has prevailed for ages past: everything unknown is magnificent; there is always something better somewhere a little farther along.

In this same direction of thought Maine has many excellent physicians. Their results are as good as obtained anywhere, their statistics of successes and failure are as favorable as elsewhere in the world, yet how many of the very same people who complain of business losses to their community and to the State from citizens buying dress goods from foreign firms, are the very ones who go themselves, and advise their friends to see distant physicians on the ground that they have larger experience and consequently know more than those at their very doors. It is notorious how many persons go to Boston or New York or Philadelphia for medical opinion and operations that can be obtained and performed right here in Maine. Instances also of Maine physicians sending patients away from the State rather than advising a consultation with their own medical brethren are far too frequent.

I shall never forget how once upon a time at the urgent request of a patient I was foolish enough to escort her to New York to consult a celebrated otologist. After obtaining his opinion, which varied nothing from mine, and paying a consultation fee which was quadruple the amount which I had been in the habit of receiving from her, the consultant thanked me and with considerable pride showed me his case book. From its pages I observed with a great deal more pride than the consultant had exhibited in showing his large practice, that on my case books in Portland there were already enrolled more patients, seen as private patients, than that famous New York specialist had ever seen up to that date!

If physicians would only recognize that they could work together to mutual advantage on their own camping ground they would not only retain home patronage, but would better establish the physicians of the community in the confidence of the locality in which they work, whereas, on the other hand, they deliberately educate the people to belittle the opinion of the local men and seek advice elsewhere. The final result will be a general distrust of the knowledge and reliability of the

entire medical profession in the minds of the lay people, who are readily turning to any and all other methods of healing. Petty jealousies should be laid aside and buried and an effort made to consult more frequently in difficult cases with one another at home. In conclusion, we should always bear in mind that in sending patients away we are reducing the income of physicians at home, and likewise reducing their money with which to pay taxes in Maine, while outside experts do nothing to liquidate.

***City of Portland, Me.
Office of the Board of Health.**

Dear Doctor: —

The local Board of Health desires to call your attention to the fact that it maintains a bacteriological laboratory for the following purposes:

First. To co-operate with and assist the local physicians in diagnosing the various contagious diseases, and in determining when it is safe for such cases to be released from quarantine.

Second. To assist in promoting sanitation and hygiene throughout the city.

Third. To keep on file careful records of all examinations made, so that such records may be available at all times for compiling vital statistics, which in itself is a very important item in safeguarding the health of the city.

Specially prepared outfits and containers for the collecting of samples of blood, sputum and cultures will be furnished to any physician making application for such at the following stations within the city limits. (Eleven stations are specified.)

This service is maintained by the city free of all expense to the physicians for such of their cases as are unable to pay for the service rendered.

In cases of diphtheria, two negative cultures on two successive days are required by the Board of Health from each patient before quarantine will be removed. Attempts to obtain these release cultures may be instigated by the physician at any time, after two weeks, which the clinical condition of the patient may seem to warrant.

In return for this service, the Board of Health desires the co-operation of the physicians in any way which will assist in bettering the service, but particularly the following:

1. By carefully writing answers to all questions asked on the card of any outfit; in this way alone can careful records of vital statistics be compiled.

2. By closely adhering to the rule of the Board of Health, whereby all specimens submitted to the laboratory for examination must be sent in the special containers provided by this Board.

Yours very truly,

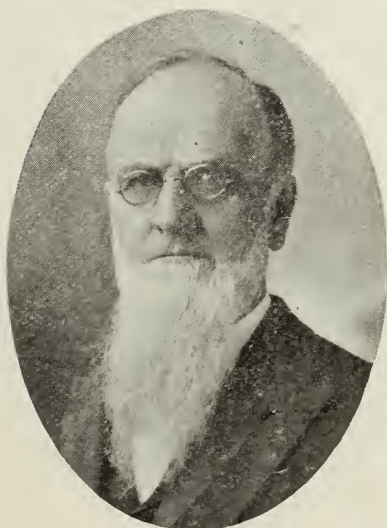
BOARD OF HEALTH.

By H. S. WATERHOUSE, *Secretary.*

*Circular letter sent to local physicians.

Necrology.

JOSHUA WILLIAM BEEDE.



This excellent physician of Huguenot and Quaker stock, once Vice President, Censor and Necrologist of our Association, was born in Poplin, N. H., April 29, 1832, and was educated at Phillips-Exeter Academy where he was fitted for Harvard. He decided, however, to enter Dartmouth, but as funds were scarce with him, he dropped out one year from his class of 1857, and was graduated in the Class of 1858, as a Phi Beta Kappa. Of Dartmouth, he remained very fond and steadily attended all of the reunions of his class.

He taught for a while in Mount Pleasant Academy at Nashua, N. H., and studied, simultaneously, medicine with Dr. John Bell of Nashua, with Dr. Joseph Nye of Lynn, and obtained his doctorate at Bellevue Medical School in 1863. He was rewarded for his high standing in the medical school by an internate at Blackwell's Island Hospital. At the end of his term of service, he married at Nashua, Abbie Maria, the daughter of Elbridge and Nancy Phelps Reed and immediately established himself in medical practice in Auburn, Maine, where he remained until his death, March 21, 1913, a period of almost fifty years.

He gradually worked into an active practice and as drugs were in those days the stock in trade with all physicians, he established for some years a drug store for preparation of his own prescriptions and

those of his brother physicians. He also obtained a high position in the community, being city physician for several years, member of school board and board of health, trustee of the savings bank and other local institutions, and was so highly thought of in the State, that he was elected Trustee of Hebron Academy and of Colby University, which as well as Dartmouth, honored him with a degree.

Dr. Beede was a charter member and president of the Androscoggin Medical Society and for many years a member of our Association. He does not appear to have written papers for discussion, but he always took a spirited part in discussions of papers by others. To his pen we also owe some excellent biographies of early physicians in Maine. He was furthermore a physician on the staff of the Central Maine Hospital.

As a man of business, he was careful and frugal. He was very religious and wrote much for the newspapers on topics of medical and civic interest. He drove about rather recklessly with a white horse which was for years well known as heralding his approach all over the country in which he practiced. In his later years, he was much given to versification (he was especially careful not to call his effusions, poetry) and this notice closes here, with his own suggestion of what would please him to be said concerning him, after his departure from this life.

Let eulogistic words be few
And tempered with reserve of praise,
Say less, then more, what seems my due,
Pass lightly o'er my devious ways.

J. A. S.

AUGUSTUS MAVERICK.

SAN ANTONIO, TEXAS.

We learn with extreme regret of the murder of this most excellent and promising young physician. In defending a servant in his own house from the assault of a negro, he was instantly killed by a revolver in the hand of the assailant. Dr. Maverick had lately come into general prominence by his remarkable medical papers, one of which entitled "Vienna Caustic" had attracted much attention with its unique account of medical conditions in Vienna. According to this lamented writer, many American students were being exploited in the hospitals and halls of medical instruction in that city. In the early death of this young physician, the entire profession will lose a brilliant literary light in medicine.

AMBROSE HERBERT WEEKS.

The recent and sudden death of this able physician surely calls for something more than a cursory notice of his excellent career.

Ambrose Herbert Weeks, the son of John Alden Weeks and Mary Weeks, his cousin and wife, was born in Jefferson, Maine, April 8, 1868, and died in Portland, June 28, 1913, after a brief illness from ptomaine poisoning and attendant typhoid. Three weeks before his death, he attended a banquet of physicians and medical students, was attacked on the following day with violent toxic symptoms, typhoid supervened and despite the best of advice and care, death carried him rapidly along.

After some educational beginning in his native town, young Weeks continued his intellectual development at the Castine Normal School and taught school for a while. He early felt an interest in medicine, beginning his studies in this branch of professional learning at the Portland School for Medical Instruction, following it zealously, and with determination to make of it a success, he was graduated with high honors at the Medical School of Maine in 1893. He soon obtained an appointment as interne at the Maine General, distinguishing himself by his interest in studying the histories of patients and following their course of treatment to recovery. As soon as his term was finished, he married Miss Laura Ann Alden of Gray, Maine, and obtaining an appointment as surgeon on the Canadian Pacific Railway, settled at

Brownville Junction. His ambition, after a year of this variety of professional life, led him to seek for a broader field for practice and he settled in Bar Mills, where he soon obtained a good country practice. But a country village with its hard work, long rides and limited clientage, with limited opportunities for obtaining wider experience did not satisfy him,

He sold his practice, and went abroad in 1904 to study, in foreign countries, the attractive subject of gastro enterology. Returning with a mind well stored with modern ideas, he settled in Portland in 1905, and obtained in due season a reasonable share of successful practice, maintaining it for the remainder of his active life.

He was in turn rewarded with a position on the staff of the Maine General, also that of instructor in the Medical School, and just before his death, he was promoted to the assistant professorship of gastroenterology in the same school.

Dr. Weeks was a capable writer in medicine, and contributed to the meetings of our association as well as to those of various local and county medical societies, papers on his favorite topics: papers which were of proper length and suggestive for discussion. He did not overwhelm his listeners with too much learning. He gave them a chance to say something for themselves. His arguments were attractive, ingenuous and interesting. Amongst his essays, mention may be made of those "On Diabetes," "On Gall Stones," and "On Secretory Disturbances of the Stomach." His testimony in the so-called "Tibbett's Case," in which a mistake was alleged on the part of an apothecary was discriminative and incisive.

As physician at the hospital, his opinions were given deliberately and judiciously, without haste, yet not with the appearance of too much knowledge of the condition of the patient. I recall with pleasure several instances in which we discussed ophthalmoscopic appearances suggestive for diagnosis, and remember his receptivity for such suggestions.

Dr. Weeks was one time president of the Portland Medical Club and as such delivered an excellent annual address, and furthermore served as censor of the County Medical Society.

Dr. Weeks has too lately left us for anybody to say all that might be said concerning him, but we recall his scrupulous neatness in dress, his quiet and reserved demeanor, his charming voice and interesting personality when engaged in conversation. It may be said of him, that although he had already partly fulfilled those early promises of what he bade fair to do as a younger man, yet he held much more in reserve for a future in medicine. We regret that the portrait at the head of this sketch affords so ungrateful an idea of his features, but as it is the only one in existence, we offer it as the best that we can do in an effort to leave some visible trace of Dr. Ambrose Herbert Weeks.

From this genial man and physician, our recent companion in medicine in Maine, we part with deep and sincere regret. J. A. S.

Book Review.

Marriage and Genetics. Laws of Human Breeding and Applied Eugenics.

By Charles A. L. Reed, M. D., F. C. S., pp. 182. (5¼ x 7¼). Price, including postage, \$1.00. Subscription only. The Galton Press, Publishers, Cincinnati, Ohio.

This book takes up and discusses the following subjects: "Falling in Love;" Courtship; Marriage; The Personal Phrase; The Problem — (a) Individual, (b) The Race; The Solution; and the Human Pedigree.

Medical and Surgical Reports of the Episcopal Hospital, Philadelphia, Pa.

Edited by Dr. Astley P. C. Ashhurst, Episcopal Hospital, Philadelphia, Pa.

This volume represents the customary tabulated reports of the work of the institution together with original papers by various members of the staff. It has numerous cuts and diagrams showing the working parts of the institution while its tabulation of cases in every department is complete. The publishing of the staff papers in connection with the annual reports is a very commendable feature while many of the papers are well worth reading in that they represent largely original work.

Inebriety, Its Source, Prevention, and Cure.

By Charles Follen Palmer. Price 50c.

This little booklet from the Union Press takes up and describes The Nervous-Mental Organization; The Inebriate's First Step toward a Cure; The Remedying of the Preinebriate Morbid Conditions and the Strengthening of the Bases of Self-Control; The Inebriate's Continued Progress in Building up Moral Manhood; and The Moral Characteristics and Various Types of the Inebriate.

Cardio-vascular Diseases. The Recent Advances in their Anatomy, Physiology, Pathology, Diagnosis and Treatment.

By Thomas E. Satterthwaite, A. B., M. D., LL. D. Sc. D. Published by Lemcke and Buechner, New York.

The author in a series of monographs presents the following subjects in book form: Recent Discoveries relating to the Anatomy and Physiology of the Heart; Sphygmomanometry and Sphygmomanometers; Graphic Methods and Instruments in the Diagnosis of Cardiac Affections; Automatic Polygraphy; the Electrocardiograph and the Spring Recorder; Some of the Newer Instruments of Precision; Cardiac Arrhythmias; High Frequency Currents in Arteriosclerosis; The Uses of Carbon Dioxide; Mobility and Malpositions of the Heart; Cardio-Vascular Thromboses; Myocardial Diseases; and Malignant Endocarditis.

Review of International Clinics, Vol. II, Twenty-third Series.

J. B. Lippincott, Publishers. Price \$2.00.

In the contents of Vol. II we find under Diagnosis and Treatment: Therapeutic Indications for Antitoxins, Serums and Vaccines; Principles of Therapy under Modern Biology; Diagnosis of Diseases of the Heart; Fetal Products in the Treatment of Carcinoma; and others. Under Medicine; Paroxysmal Hæmoglobinura: its Relation to Syphilis, especially in the Light of the Wasserman Reaction; Factors in the Clinical Physiology of the Heart; etc. Under Neurology: Psychoneuroses in the Male and a study of three thousand cases seen in Private Neurologic Practice. Under Surgery: Review of a Year's Work in the Surgical Dispensary of the University Hospital, from the Standpoint of the General Practitioner. Under a Surgical Clinic: Tuberculosis of the Scapula, Sarcoma of the Finger, Cyst of the Thyroid, Enormous Hydrosalpinx, Tubal Pregnancy; the Use of Iodine in Abdominal Surgery, Gynæcology, and Obstetrics; and Hæmosteotomy. Besides these are articles under Obstetrics, Medicolegal and Electrotherapeutics.

**It
offends
no palate.**

Hydroleine
is exception-
ally diges-
tible.

Hydroleine

Made from pure Norwegian
cod-liver oil, emulsified
after a scientific formula
by approved processes.

Hydroleine
has received
the approval
of physicians
because — thor-
oughly dependable, without
medicinal admixture—it
can be used in *every* case in
which cod-liver oil is indi-
cated. Sold by druggists.

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York
Sample will be sent to physicians on request.

County News.

CUMBERLAND.

The first meeting of the Cumberland County Society will be held at the Congress Square Hotel, October 10th. We have been fortunate in securing Dr. Timothy Leary of Boston as essayist for the evening. Dr. Leary gave the Society a most interesting talk two years ago on Bacterial Vaccine and we hope at this time that he will discuss this subject further, with reference to its later developments. A cordial invitation is extended to the members of the other county societies.

PORTLAND MEDICAL CLUB.

The sixth regular meeting of the year was held at the Columbia Hotel, September 4th, 1913. The paper of the evening was by Dr. M. C. Webber, his subject being "Sympathetic Ophthalmia: its Genesis, Prophylaxis and Treatment." Dr. Webber's paper was very instructive and well-written, and presented to the members of the club an entirely new theory of the causation of this disease. The paper was ably discussed by Dr. A. H. Little, who reported three cases of sympathetic ophthalmia, coming on in twelve days, six months, and seven years, respectively, after the injury to the first eye.

Dr. C. W. Foster reported the case of a woman aged 87 who had apoplexy affecting the right side of the body and at the same time had gangrene of the left hand from no apparent cause.

Dr. Webber reported the case of a woman who accidentally swallowed an antiseptic tablet containing 7.7 grains of bichloride of mercury, and five days later had anuria for twenty-four hours, followed by complete recovery without other symptoms.

A special meeting of the club was held at the Columbia Hotel on September 11th, at the call of the President.

Drs. G. A. Pudor and G. B. Swasey were appointed a committee of two to present resolutions upon the death of Dr. A. H. Weeks, a former president of the club.

The question of an open meeting of the club for October was discussed, and it was voted that no such meeting should be held this year, the arrangements for the next meeting being left to the President and Secretary.

R. B. MOORE,
Secretary.

FRANKLIN.

On June 5th, the members of the Franklin County Medical Society had an outing at Belgrade Lakes. The ladies were invited and there were a number of friends present from Somerset and Androscoggin Counties.

After a short business meeting, at which Dr. E. C. Higgins of Phillips was elected to membership, a fine dinner was served at the hotel and then nearly everyone went on a very enjoyable sail on the lake.

On Sept. 18th, the Franklin County Medical Society held a regular meeting in Farmington. Miss Mary Penney of Portland read a very interesting paper and gave a demonstration at the State Normal School.

G. L. PRATT,
County Editor.

HANCOCK.

A regular meeting of the Hancock County Medical Society was held at the residence of Dr. Augustus Thorndike, Bar Harbor, on Wednesday, August 20th, at 8.30 P. M.

The meeting was called to order by the president, Dr. Frank R. Ober.

Nathaniel Gildersleeve of Philadelphia, read a paper on: "Diagnosis of Oral Infections." Discussion was opened by Dr. Harold L. Williams, of Boston, and continued by Dr. Clark and Dr. Briggs, of Boston.

Dr. Frederick Peterson, of New York, gave us a talk on: "Syphilitic Disorders of the Nervous System." Discussion opened by Dr. Charles Frazier, of Philadelphia, and participated in by nearly all the members present.

Both papers and discussions were extremely interesting.

We then adjourned to a sumptuous repast and a pleasant social hour was spent.

FRANK R. OBER,
County Editor.

OXFORD.

The regular quarterly meeting of the Oxford County Medical Society was held at Mechanic Falls, Sept. 29th.

Dr. W. L. Cousins of Portland read a paper entitled "The Necessity for early Diagnosis in Abdominal Surgery and Recognition of Conditions as Found."

Dr. Cousins was extended a vote of thanks by the society for presenting a valuable paper in a practical and interesting manner. A thorough discussion followed which was participated in by nearly every member present.

D. M. STEWART, *County Editor*.

PISCATAQUIS.

A special meeting of the Piscataquis County Medical Society was held at the Y. M. C. A. hospital at Greenville Junction, on Thursday, Sept. 18, 1913. The members gathered about 11.00 A. M. and were shown over the building by Drs. Hunt and Pritham. The hospital is wonderfully complete in every detail and the members of the Society were glad to see the good work done in that part of the county by the Greenville doctors.

About 12.00 o'clock, the meeting was called to order by the President, Dr. N. H. Crosby of Milo. Dr. Peters of Bangor, President of the Maine Medical Association, read a very interesting and instructive paper on "Fractures in and near the Joints," which was freely discussed by the members.

After the meeting all sat down to a banquet in the Y. M. C. A. dining room. The afternoon was spent in bowling and pool and billiards, the members leaving for their homes in the late afternoon, after having enjoyed a most successful meeting of the Society.

Those present were: Dr. William C. Peters of Bangor; Drs. L. C. Ford and N. H. Crosby of Milo; Dr. C. C. Hall of Dover; Dr. C. C. Hall, Jr., of Foxcroft; Dr. R. H. Marsh of Guilford; and Drs. Hiram Hunt and F. J. Pritham of Greenville.

C. C. H., JR., *County Editor*.

YORK.

The next quarterly session of the York County Medical Society will be held in Sanford the latter part of October. A good program will be provided and a large attendance is expected.

The present membership roll has 69 names, which is a gain of about 25 members during the past two years. Sanford is an especially desirable place for our York County Medical Society meeting, which has not been held there since April, 1911.

Dr. W. Bean Moulton has accepted an invitation to read a paper at the coming meeting. Dr. Moulton is one of the best known of the younger surgeons in Portland; is instructor in gynecology in the Bowdoin Medical School; one of the editors of the Journal of the Maine Medical Association and was for five years secretary of the Maine Medical Association.

Personal News and Notes.

Dr. E. L. Pennell has removed from Kingfield to Auburn and Dr. O. W. Simmins has returned to Kingfield after several years' absence.

The marriage of Miss Cora Lillian Milliken, daughter of Mr. and Mrs. B. Frank Milliken of Old Orchard, and Dr. Arthur Leon Jones of that town, occurred at the Milliken home, Monday evening, Sept. 29. Rev. Walter Canham, pastor of the Methodist Episcopal Church in Farmington, Me., was the officiating clergyman.

Dr. J. R. Larochelle of Biddeford has recently returned home after a visit in Quebec and other Canadian places.

Dr. Herbert E. Milliken has returned to Portland after a year's absence and will open an office at 181 State Street. Dr. Milliken has been engaged in post graduate study in New York, Vienna and Berlin and intends to specialize in the field of internal medicine and diagnosis, with particular attention to the treatment of diseases of the digestive tract and the disorders of nutrition and metabolism.

Dr. Wm. Moran has returned from a European trip.

Society News and Notes.

American Academy of Ophthalmology and Oto-Laryngology.

The eighteenth annual meeting of the American Academy of Ophthalmology and Oto-Laryngology will be held in Chattanooga, Tennessee, Monday, Tuesday and Wednesday, October 27, 28 and 29, 1913.

Lieutenant Colonel R. H. Elliot, Superintendent of the Government Ophthalmic Hospital, Professor of Ophthalmology, Madras, India, will be the guest of the academy and deliver the oration in Ophthalmology.

Headquarters and meetings will be at Hotel Patten.

Clinical Congress of Surgeons of North America.

The Clinical Congress of Surgeons of North America will be held in Chicago, Nov. 10 - 15, 1913. It is hoped that a large number of our Maine physicians will attend this meeting.

Those intending to do so are requested to notify Dr. Herbert F. Twitchell, 10 Pine St., Portland, Maine.

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

NOV., 1913.

No. 4

THE EYE: ITS CONNECTION WITH DISEASES AND INJURIES OF THE BODY.

DR. J. A. SPALDING, PORTLAND.

Mr. President, Fellow Members of the Maine Medical Society, and of its Ophthalmological and Oto-laryngological Section:

It gives me great pleasure to act as a representative for the first time in our mutual history, of members who specialize in diseases of the eye, ear, nose and throat. Such a part in the parent organization we have long desired, and I trust that this beginning may be followed by many successful repetitions.

In thinking of a subject for discussion which might interest you all, I was balanced between injuries of the eye, iritis, and the eye in connection with diseases and injuries of the body. After long consideration, the last of the three seemed most likely to interest a majority of our members and upon that subject I now have something to say.

Hundreds of books and thousands of papers have been written in the past, and will continue to be written so long as life endures upon this world, on the interdependence of the eye, and diseases and injuries of the body. For all that, the legislature of Maine saw fit four years ago to set its denial upon this well known truth, and to assert that there was no connection between the organ of sight and the human body. It will forever remain a source of regret that such an ignorant law should have been passed, but politics, money, a powerful and persistent lobby overpowered our small band of protesting physicians. So far, under this law, nothing has been gained for the people, the medical profession has lost ground, and ignorant, uneducated men are allowed to practice one branch of pure, absolute medicine

as they see fit. The certificates under which they carry on this practice flaunt in the face of the public the false assertion of "examinations for fitness," that have never been passed, and in the four years of the presence of this useless law upon our statute books, not a single educated man has been added to the ranks of the exempt and often unfit. This paper, therefore, is a protest against this outrage upon the people and physicians and an assertion once more that the eye and all of its functions are so absolutely connected with the body that the whole must be considered as component parts of one general system of life.

Let me now throw aside books and essays, and tell you of recent instances in my private practice which bear out the truth of what has just been said.

DIABETES often affects the eyes in the form of inflammation of the retina, with loss of vision and of cataract. I will pass by diabetic retinitis as a rare affection, but will say a word or two concerning diabetic cataract. Last year, I saw a case of this sort. Twenty years ago, and ten years ago, I saw similar cases and I cannot help contrasting the results obtained then and now, in cases just alike. In the former cases, all possible precautions were taken, but the eyes suppurated after well performed extractions. The recent case went this way: When the man consulted me, he was tested for sugar, the percentage found, and then I said to him: "If I operate now I may destroy your eye, and your chances for vision. Go home and diet under your physician's directions and when he says that you are free from sugar, come back to me." This he did, and obtained excellent vision in the eye operated upon. When he calls for an operation on the other eye, he shall have it done precisely as before. First, sugar-free; next a simple extraction.

Let me here suggest that forty years of experience prove that the results of all cataract extractions depend enormously upon the bodily condition of the patient, as well as upon the condition of the eye-lashes, eye lids and tear passages.

People say to me: "So and so is too old for a cataract operation, is he not?" and I say, that no one is too old for such an operation if he has reasonable health, clean eye-lids, and no muco-purulent secretion within the tear passages. I have operated successfully on a man over 92, and often when patients were over eighty.

I have never operated on one eye that was cataractous when the other eye was good. I have in that way lost many fees, but I have not gained patients that hate you: and hate you they will, if you operate on unilateral cataracts (the other eye being sound) and your operation is followed by iritis or slow irritation lasting indefinitely. Enemies also you will get if the result is apparently good, and if the patient soon discovers, as ultimately he will, that the difference in refraction be-

tween the two eyes is so enormous, that the good eye does all the work, just as it did before the tedious and expensive operation. Finally, to operate on unilateral cataract and then to see your patient die, as die they may after any such operation, compels you to curse yourself for so completely deceiving the patient and his relations. It doesn't pay you, when of the patient thus thrust out of the world, his children cry that he would have been better off never to have had it done.

Shall you tell patients that their eyes are cataractous? It is hard to decide. I once told a woman that she had a cataract, and she went insane. I failed to tell another the same fact, and another physician got the fee. You have got to know your patients as human beings before you can tell the exact truth to any of them.

NEPHRITIS often shows itself in the eye in the form of hemorrhages or fibrous degeneration. Perhaps one patient in four with nephritis has ocular symptoms. The most rapid case that I ever saw of death following loss of sight from nephritis was in this way.

A woman of 35 of perfect health was suddenly affected with loss of sight in both eyes. I saw her in an hour, and diagnosticated albuminuric retinitis. In two weeks, she was dead. This was the shortest case, the longest was four years' interval. If asked how long such patients are likely to live you are to say that no one can tell. If asked whether the patient will be blind, you can confidently say that they will not, though sometimes very little sight remains.

PROFUSE HEMORRHAGES often produce serious loss of sight. A man was hit on the head with the butt of a musket, the hemorrhage was abundant, the sight was permanently and seriously affected. A woman in her fourth pregnancy had the misfortune to suffer from dead foetus at the third month. Whilst her physician was wondering just what to do, nature interfered, threw off the foetus, but so profuse a hemorrhage ensued that the life of the patient was long despaired of. She finally rallied, only to find herself nearly blind in both eyes. She was taken in hand with massive doses of strychnia, hypodermatically, and she finally obtained nearly normal sight in both eyes. Strange to say, however, both optic discs remain as white as marble, and the pupils have never recovered their mobility.

ARTERIO SCLEROSIS may impair the sight. A young woman suffered from eclampsia in child bed, and after recovery discovered that the sight of one eye was lost. As she grew older, arterio sclerosis developed and one day when bending over, "a cloud" crossed her sight reducing it to one-half of normal. She consulted six oculists, here and there, and all of them agreed that she had suffered from hemorrhage into the retina, and that the eye was hopelessly damaged. None of these experts suggested any treatment. I happened to be the next

consultant and I found that nothing had ever been tried therapeutically. Hypodermic injections of pilocarpine brought about, much to my amazement, I can assure you, a perfect cure. With this one eye, the other long since blind, she can read. "The Lord be praised," she said, and I added, "Give me a little, too."

A patient during influenza blew his nose most forcibly, and then complained of loss of hearing in his left ear. I found a hemorrhage between the layers of the drum head, but after a while it disappeared and hearing became normal. This same patient, a year later, soon after a hearty meal, bent over to buckle on his Arctics, and instantly perceived a cloud before his best eye. The other eye had long been glaucomatous and blind. Pilocarpine injections soon caused the sudden retinal hemorrhages to disappear and useful vision was obtained.

Another patient with arterio sclerosis ran up stairs very rapidly, and suffered almost instantly from the very rare affection of hypæma or blood into the anterior chamber of the eye. Iritis set in, but a cure was ultimately obtained and good vision.

RHEUMATISM causes innumerable inflammatory conditions of the eyes. We all know that iritis is largely dependent on this cause. We know, too, that no physician would dream of treating iritis without medication for the constitutional cause. This is our reason for salicylates and iodides. Serous iritis often occurs in the middle aged, and, without much if any pain, the sight becomes much affected. In these cases, the pupil becomes adherent and the sight greatly and permanently impaired. Acute rheumatic iritis may last a month, but serous iritis may last a life time. Physicians should be on their guard against serous iritis in women during the change of life and recognize it early.

Rheumatism may also produce effusion within the sheath of the optic nerve with neuritis, and loss of sight. I recall a nurse who often suffers from such attacks, but who soon obtains relief from salicylates.

SYPHILIS is the basis of every inflammation of the cornea, and is a frequent cause of iritis. When we can diagnosticate syphilis from rheumatism by its bacilli, we can vary the treatment accordingly. Salvarsan is of great value in syphilitic eye affections of all sorts. Distilled water hypodermatically, it is also claimed, will cure syphilis as well as any remedy. Syphilis is also a prominent cause of ocular paralysis. Of six recent cases of this affection, two were due to syphilis. A syphilitic man, who had long since fancied himself cured, suddenly saw double. This symptom disappeared, then recurred, and remained permanent. He exhibited paralysis of the external rectus. Iodides disagreed with him, as did mercurials and salvarsan. Passive motion was tried, and the eye after cocainization was grasped firmly with forceps over the insertion of the paralyzed muscle and moved to and

fro. No result was obtained. The patient consulted many physicians, and came one day in a violent passion because I had told him to cover one eye and thus to relieve his discomfort. He claimed that another physician had said it would injure any eye to keep it covered. He cursed me, even when I showed him this advice in a dozen treatises on the eye. Prisms and an operation on the muscles may be of benefit in such cases, but I have never had success with them. Treat, as above suggested, and give the best prismatic lenses obtainable.

Another case of ocular paralysis was also due to syphilis and the patient was much relieved. A third patient had a slight fall on the occiput, and within two days diplopia developed. The paralysis of the superior rectus was soon cured. A fourth case was due to a blow on the head, but that, too, recovered. A fifth case was due to diphtheria, and was cured in time. The sixth case depended on pus in the nasal accessory cavities, and when that was relieved the eye symptoms ceased to be troublesome.

The diagnosis of ocular paralysis may often be made by observing the difficulty which patients exhibit in going up, or coming down stairs.

I have seen several instances of DIPHTHERITIC paralysis of the accommodation, and a fatal case of cardiac paralysis from the same cause. I have also seen a case of paralysis of the left inferior oblique after a revolver shot of the orbit.

Sajodin, I will suggest, may be used as a substitute for the iodides when ill borne, in paralysis of the eye muscles.

SEXUAL IRRITATION OR SEXUAL EXCESSES may occasionally reveal their influence in the eyes. I remember seeing two brides who abbreviated their honeymoons owing to iritis. I have also lately seen two instances of atrophy from such excesses. I shall never forget three young men who once consulted me for optic atrophy. They had hired a fine room for their lady partners and themselves, and carried on sexual intercourse every day, and oftentimes several times daily for long intervals, until their sight began to fail. Skilled treatment obtained for them nothing more of sight than to enable them to be common day laborers. One of the three committed suicide.

The EAR may affect the eye. If cold or hot water is syringed into a healthy ear, nystagmus is produced, depending in its direction and rapidity on the temperature of the water and the force employed. The ocular nerve so affected is the abducens. This relation between the two special organs being well known, there is no reason why we should doubt the evidence of our senses by seeing ulceration of the cornea relieved by syringing enormous masses of wax from the auditory meatus.

The TEETH often cause reflex irritation in the eyes. I will mention the case of a young woman who professed great satisfaction in wearing lenses for irritating eye symptoms, which ceased, as well as the need of lenses with attention to ORAL SEPSIS. Another patient suffered from eye strain until relieved by lenses, yet when her teeth were separated and straightened the symptoms ceased and lenses proved unnecessary. PYORRHOEA ALVEOLARIS often produces spasm of accommodation. The most remarkable instance of ocular dental reflex with which I am acquainted was of a young woman in whose condition five physicians could discover nothing abnormal. She suffered from double iritis, violent pain, loss of sight and inflammation of the vitreous. Iodides, mercurials, intestinal antiseptics and autogenous vaccines were employed in vain. She obtained no relief until the crowns of two teeth were removed, and the underlying mischief revealed and cured. A year later she had vision of two-thirds in each eye.

The TONSILS are often mentioned as germ bearers, and I have seen, recently, two instances of optic atrophy following tonsilitis. In one case the woman of 45 had right sided tonsilitis with high temperature, and she lost forever the sight of the right eye from optic atrophy. This patient was seen by a brother oculist who, without knowing my opinion, verified it to the patient. Another young woman suffered in succession from unilateral tonsilitis, and in each instance the sight of the eye on the same side with the affected tonsil suffered from optic neuritis, and partial optic atrophy. The vision fell below one-half of normal, but finally rose to normal with a defective field of vision.

PROLONGED LACTATION often produces some mild eye symptoms, such as weak accommodation and conjunctivitis. I saw, last winter, repeated attacks of corneal ulceration in the eyes of a woman who was nursing her infant overlong. When the child was weaned, the eyes soon improved.

In mentioning SYPHILIS, as a cause of eye disturbance, I omitted two late cases of gumma, one in the anterior chamber, the other an unusually rare case in ophthalmology of gumma of the optic papilla. In the absence of a pathological examination, the diagnosis was not positive, but the disappearance of the gummata under specific medication, proves it to be a reasonable certainty.

Every physician sees cases of phlyctenular and interstitial inflammation of the cornea, in children, and although some cases may depend on intestinal irritation from WORMS, or from INDICANURIA, or from auto-intoxication or bad teeth, yet most frequent as a cause is syphilis or tuberculosis. Vaccine therapy in such cases has some value, but fresh air, good food and pure milk are indispensable for a cure.

Amongst one of the first symptoms of the EXANTHEMATA is a

slight conjunctivitis, and marginal ulceration of the cornea; for instance, in the measles. I remember a case of optic atrophy with blindness from measles. Just as this disease in adults may cause death from meningitis, so that same complication, though not proving fatal, may produce optic atrophy. ERYSIPELAS is occasionally followed by optic atrophy in the eye on the side of the face affected.

Idiopathic hemorrhages into the vitreous are occasionally seen in ADOLESCENCE. The blood exudes from the choroid, bursts through the retina and invades the vitreous. The treatment of these cases is difficult, and prolonged, but often successful. I have now under observation a case of this sort seen thirty years afterward. The vision has remained useful ever since the original recovery a year after its occurrence. In such cases, we may venture on a favorable prognosis. I must here emphasize the fact that cases of this sort are often erroneously diagnosticated as detachment of the retina, and when recovery ensues the case is spread abroad as cure of detachment. I should never credit a cure of detachment of the retina, in which a diagnosis of actual detachment had not been made by at least two independent observers.

INJURIES OF THE BODY, remote from the eyeball itself, add proof to the interdependence of the eye and the body. Injuries of the orbit come under this heading. A man was hit on the right orbital ridge with a small stone, a woman ran against the edge of a door in the dark, a clergyman fell from his bicycle and hit his face above the eye, a man in the Spanish war was hit on the orbit with a bursting shell, a civilian fell from horse back and injured his head, and in all these instances the sight of the eye nearest the orbital injury was totally destroyed by a hemorrhage extending into the optic nerve sheath. In no one of these cases was the eyeball itself even grazed.

One of the most extraordinary instances that I ever saw of the connection between the eye and the body was this: A man standing a little too near a trolley car rounding a curve was struck by the dasher, and thrown slightly backward, so that he lost his balance and fell on the occiput. Immediately afterward he suffered from epistaxis, then gradually became unable to work, complained of a blur over his vision, and finally of total loss of the left half of the field of vision in each eye. A diagnosis was made of traumatic degeneration and softening in the right occipital lob, and at the post mortem examination which was ultimately made, for the man died as the result of the injury, a focus of hemorrhagic softening was found in the region indicated and thus was the diagnosis triumphantly vindicated.

JAUNDICE shows itself in the conjunctiva, typhoid fever, cirrhosis of the liver, sun stroke, goiter, chronic diarrhoea, and so on, in an end-

less series of bodily affections, reveal themselves after careful examination with the ophthalmoscope. Many such instances could be added to this paper but my purpose has been merely to cite recent cases in office practice with a view of opening discussion. The longer we practice, the more we see that the eye can be removed surgically from the body, but that so long as it remains in the orbit and is attached to the body with nerves, muscles and a nerve of special sense, the more it stands as constant proof that it is a component part of the body and belongs with the treatment of all its functions to PHYSICIANS ALONE.

THE ROLE OF THE NOSE, THROAT AND EAR TO GENERAL DISEASES.

BY DR. STANWOOD E. FISHER, PORTLAND, ME.

Otologists and rhinologists are becoming more and more of the decided opinion that the ear, nose and throat play an important part in many general diseases — some directly and others indirectly.

Many contagious and infectious diseases, such as scarlet fever, measles, diphtheria, small pox, pneumonia, pleurisy, grippe, meningitis, typhoid fever, "due to infected dust," and gastro-intestinal disorders, have their origin and point of infection in the nose and naso-pharynx. The nose and naso-pharynx of a healthy individual may possibly be a carrier of infectious diseases, and by hygienic measures could probably be prevented from securing a new foothold.

Many of the so-called "colds in the head" that often are the forerunners of so many diseases, respond much more rapidly when frequent cleansing of the nose and naso-pharynx with mild alkaline douches and sprays is persistently followed up. Take a case of scarlet fever with profuse discharge of mucus from the nose and throat and give a large alkaline douche and notice the amount of relief the patient receives from such a procedure, often falling into a quiet natural sleep.

It is this mucous discharge from the nose and mouth of a patient suffering from scarlet fever and measles, that is the most contagious, and during this stage isolation should be strictly enforced. The desquamation of scarlet fever is thought by many to be the result of the toxæmia, that had its origin in the nose and throat, and it is not the most contagious as was once supposed.

DIPHTHERIA. Where do you look to make the diagnosis of this disease? You cannot say the case is cured until you can get three

successive negative cultures from the nose and throat. There are cases that we run across very frequently that to get a negative culture (free from K. L.) from the nose is almost impossible. I refer especially to children where a diagnosis of nasal diphtheria is made. These cases show K. L. in the nasal discharge from the nose for months, and they all should be isolated until a negative culture is procured, which will often be no less than six months. The child is not sick but the K. L. is in the discharge for months, and the child is therefore a "carrier." Here, particularly, frequent douching of the nose and mouth is most important, using at least one quart of normal salt solution.

THE NOSE. — The nose is both a respiratory and olfactory organ. As a respiratory organ, it prepares the air for the lungs, filters it, warms and moistens it. The body resistance is much lowered by improper nasal breathing. How can a child that habitually breathes through its mouth be free from all the bronchitis and pneumonia that you are called so often to treat? The child has not a fair chance, as the bacteria that are ordinarily stopped in the nose, do not meet any obstruction until they are lodged in the bronchi. Again, there are many cases of gastro-intestinal disorders that have their origin in the naso-pharynx, the constant secretion is constantly being swallowed and it upsets the digestion, and the blame is laid to improper diet.

As an olfactory organ, it produces the sense of taste, and thus governs the ingestion of suitable foods for the maintenance of the body.

The mucosa of the nose as an etiological factor in hay fever and asthma is well known. According to Professor Killian, there are six points in the nose where the causes of these diseases are most likely to be found. These points are the anterior end of the inferior turbinate, the front part of the septum, the lateral walls of the nose above the anterior end of the middle turbinate, and the upper end of the septum above the tubercle. A case that I have under treatment at present will illustrate the necessity of having a free breathing space through the nose for the relief of asthma.

Mr. D., aged sixty-six, has suffered a great deal with asthma the past year. He has been unable to lie down at night and has often sent for his family doctor to enable him to get relief. Examination of his nose shows a high deviated septum to the left and nasal polypi in both nares. He could get a little air through one side. I removed all the polypi and most of the ethmoidal cells through the anterior nares, with the result that he gets a good night's rest and has been practically free from his asthmatic attacks. The "family doctor" has not been called at night, for the past month.

FUNCTION AND PATHOLOGY OF THE TONSILS. "J. J. Kyle of Indianapolis. — "The function of the faucial tonsil and of adenoid tissue, which is found in the vault of the pharynx in most children at birth, is as yet imperfectly understood. That the tonsils sometimes allow bacteria to enter the tonsillar epithelium and lymphatic channels of the neck, and also that they sometimes prevent the entrance of bacteria into the lymphatic channels, are undisputed facts. It may be that, in a healthy tonsil, bacteriolysins and antibodies are produced in sufficient quantities to neutralize any bacteria or bacterial products which may penetrate the crypts or surface epithelium, thus preventing constitutional infection. In many cases some local or general condition may so irritate the tonsils as to allow infection to enter the epithelium or lymph stream, producing local or general symptoms. There is a direct connection between the cervical lymphatics and the tonsils, and it is probably by this avenue that general infection spreads from the tonsils through the body, supplemented sometimes by the blood stream. It is observed that hypertrophied cervical lymphatic glands have a tendency, in most cases, to disappear on the removal of the tonsils in their capsules. The size of the tonsils has nothing to do with cervical adenitis and general infection. A small cryptic tonsil of a degenerative type is usually more productive of adenitis and general infection than large pedunculated tonsils, whose greatest harm is interference with normal respiration."

The tonsils, microscopically, are lymphatic tissue and the whole intestinal canal is everywhere surrounded by lymphatic glands. There are twenty times more lymphatic tissues throughout the intestinal tract than there are in the tonsils, so, whatever function the tonsils may have, I have yet to see or read of any great harm resulting from the removal of tonsils in properly diagnosed cases, but I do think that there is a too much wholesale removal of these much sought after organs. If you do remove them for any diseased condition, take them out completely in their capsules.

TONSILS AND TUBERCULOSIS. — The relation of the tonsils and tuberculosis is a very important one. Tubercle bacilli may be lodged in the crypts of the tonsils and from there may easily find their way to the lungs. Three years ago, I examined the throats of all the patients in the tuberculosis class in Portland. Most of the patients, especially the children, had diseased tonsils. These I removed in capsules, and every case showed much benefit from the operation.

TONSILS AND RHEUMATISM. — It is becoming more and more common to recommend the removal of tonsils in the many forms of rheumatism, particularly in acute articular rheumatism. Often, following an attack of follicular tonsillitis, there is an attack of acute

articular rheumatism. Tonsils have been credited as the cause of endocarditis, meningitis, nephritis and appendicitis. Such cases are rare and it may be more co-incident than a real cause.

ADENOIDS. — Adenoids come in for their share of causing the above diseases and are often times more of a factor than the tonsils. Cheesy deposits are sometimes seen in the adenoid, as are found in the tonsils. The effect on the general system of a case of adenoids is usually well known, the child being poorly nourished, anæmic and showing all the signs of suboxidation. The protruding upper lip with open mouth, receding chin, broadening of the bridge of the nose, alteration in tone of voice, impaired hearing, mental hebetude and aprosexia, nasal discharge, snoring at night, complaints of headache and of being tired, with frequent attacks of irritability, peevishness and bad temper. Later may be found the high arched palate with irregularity of the teeth and deformity of the chest, known as "chicken breasted," accompanied by the characteristic vacuity of expression and dropping of the jaw. Adenoids cause more obstruction to breathing than the tonsils, and are also a cause of the greater part of aural infection.

THE EAR. — A progressive deafness with tinnitus is a strong factor in nervous exhaustion. We little appreciate, except the very deaf themselves, the amount of energy required to carry on an ordinary conversation. Dr. C. J. Blake, of Boston, says that the deaf have to exert three times the amount of energy, in carrying on an ordinary conversation, than the non-deaf. First, they try to hear, secondly, to see (the lips), and then to understand. Both acute and chronic types are quite often met by the general practitioner, and their effects on the general system are well known. Meningeal and brain affections often result from them. Three-quarters of all brain abscesses are caused by middle ear infection.

In conclusion, I will say, as this is the period of preventive medicine, the prophylactic treatment of the nose, throat and ear, is of the greatest value for the prevention of many diseases and diseased conditions.

I have enumerated many diseases that attack the body through the nose and throat, and there is one diseased condition that I should mention somewhere in this paper, and that is atrophic rhinitis with crusts, known as ozena, which has its starting point in children and very often is due to neglect. A child has frequent colds with acute rhinitis, the acute condition soon becomes chronic, and chronic rhinitis invariably extends into atrophic rhinitis, which is one of the worst afflictions with which we have to deal.

DISCUSSION.

PRESIDENT: Gentlemen—These papers are now open for discussion and according to the program the discussion is to be opened by Dr. Hill of Waterville.

DR. HILL: In opening this discussion of Dr. Spalding's paper, I want to endorse all he said in regard to the opticians, the sentiment expressed by him regarding the legislature, its recent action in admitting, and so legalizing, a group of mechanics to treat such a sensitive member as we know the eye to be, perhaps the most important organ in the human body. We know, of course, what it means. It means that this body of mechanics have fought the thing out; that they have had men on the floor of the legislatures to look after their interests, to forward their claims in every way possible and to thus create this profession. They cannot take the time to see whether these men are proficient as to their claims—that part does not concern the men who go to the legislature. Their part is to legalize this particular branch of business. We take the ground that we were obliged to go to college, to study hard and to spend many hours of our time in perfecting ourselves in this profession in order that we might perform our work with perfect safety to the public, while they, simply by going to the legislature, are granted legislation that allows them to enter the profession and to perform the work that they claim to be able to perform, as freely as we. They may treat this delicate organ, the eye, just as we may treat it, without any more restraint. They have the same privileges that we enjoy, even though it has taken years of our toil for us to gain those privileges.

I shall report three cases that, had they been placed in the care of an experienced eye specialist when the trouble was first discovered, instead of going to one of these general practitioners or opticians, might have culminated much more favorably for the afflicted ones. I have no doubt that many times the vision is completely lost, when had proper treatment been resorted to at the beginning of the trouble, vision might have been partially, if not entirely, restored.

The first case I shall refer to is that of a lady in Skowhegan, sixty-four years of age, who came to me to get glasses. I examined her and found no vision whatever in the left eye, and it showed such an advanced case of glaucoma that the vision appeared to be irretrievably lost. Upon questioning the woman, I found it had been so for three years. Of course there was nothing to do but to allow her to go on. With the right eye, she could count fingers at a few feet of distance, and I was able to get some vision with proper glasses. I got about twenty-sixtieths out of the lenses, but found she had practically the same trouble with this eye as with the left, and the sight was rapidly going as the other had gone. This lady was under the treatment of a physician for neuralgia and he treated the eye also, supposing it to be affected by that, and the vision went out while under this treatment. She afterwards went to an optician in town and he put glasses on her. They proved to be of no help and finally she appeared at my office sent there by the physician who had gotten hold of the case. There was a case where the physician was at fault.

The second case is a brief one. A man aged sixty-two came to me, after having been treated by several opticians in my town. His eyes were both badly affected when I first saw him—no vision, practically, and he died within three weeks.

The third case was a man fifty years of age, of Fairfield Center. He came to me to get glasses—and I found in his case choke discs in both eyes. He

had been to an optician and had gotten glasses several times. It was the old story that we have all heard so many times. He finally was sent into my office to hear the pitiful story that it was too late, and that there was nothing to be done for him practically. He had a son in Boston who was at that time practising law. I called him over the telephone and told him I was going to send his father to him on the next train. He took him to Myles Standish of Boston and several other eminent eye specialists, but they could not do much for him and advised his son that it was only a matter of a short time before his sight would be gone entirely.

These cases are only the history of many cases where men and women feel the need of something to stimulate the sight perhaps, or think they need glasses, and go to opticians who are near them. After continued going and perhaps many changes in glasses, without producing any permanent relief, they are advised to go to an eye specialist, and they get in to see the eye man when it is too late to get proper glasses.

I am sorry that every medical man in Maine could not have listened to these papers, and especially to that of Dr. Spalding, and that they could not get into the habit of having a reliable eye man to assist them in the work of diagnosis when it seems desirable.

DR. BEACH: Mr. President and Members of this Association. — I wish that more of our general practitioners had had a chance to listen to these papers by Dr. Spalding and Dr. Fisher. I agree with what Dr. Hill has said. Not only is the eye dependent upon the body, but any marked change in the general body shows immediately in the eye. We cannot be too careful in the treatment we give the general body, looking to the effect upon the eyes. A case of this kind came to me only three days ago. The patient came to me to be treated for sudden blindness in one eye. She was a woman about forty-five years of age, and she had been led to believe that various nervous symptoms which she had developed, were due wholly to the approach of the menopause. The fact was that the lost vision in that eye was due to hemorrhage which I was unable to understand, but which led me to take her blood pressure and I found it to be 210. There were other circumstances regarding the case that would seem to dispute many of the things we have been taught to expect, but these show how impossible it would be to attempt to correct disturbances of this nature by treating the eye alone, or by merely putting glasses on the patient.

I had a case in consultation not long ago — a gentleman who was apparently approaching general paralysis due to syphilis. The case had gone on so far that his general system had become affected. He had the unmistakable Argyle-Robinson pupils in both eyes. Treatment for his general condition soon resulted in an improvement in the eyes. The Argyle pupils are still present, but there has been no progress of the disease for practically three years.

Another case was a man who had erysipelas in his face and was suddenly attacked with blindness. There are various relations between all parts of the body and the eye, as we have learned, by which it is not difficult to account for a case of this kind. Not long since I was asked to see a case where blindness began soon after an operation for adenoids, and the blindness increased until it was almost absolutely total, a month after the operation. Many of these cases have been repeated in the practise of many of us, and it is a well known fact that many cases of syphilis become manifest first through the eye. I have seen several cases of this kind that developed soon after marriage, which was the first inkling one of the parties had that the other had syphilis. Of course

it is easy to imagine the harm that could easily be done by treating a case of that order in any method other than that of treating the general health. Putting on glasses would be of no benefit whatever.

PRESIDENT: The paper is now open for discussion.

DR. HOLT: I am sure we have all listened to both these papers with much pleasure and profit. It is of course impossible in a short time, say only five minutes, to give much in the way of experience in this line of work or any other and we shall need to confine ourselves to one point at a time instead of trying to cover the whole ground. One of the commonest troubles we run up against in the practice of this profession is perhaps iritis, and it is one of the simplest, if treated correctly and promptly. As I say, it is the one that the practitioner stumbles onto oftenest. Why? Perhaps because it is aggravated by so many other conditions of the body or by erroneous treatment of the eyes by the optician. I suppose most of us have seen these cases that have been prescribed for by the general practitioner and found them more or less aggravated because of the improper treatment or strain that improper glasses have put upon the eye. Of course, we all know that the iris regulates the light of the eye, and it contracts or dilates according to the light which it receives. In the dark it grows large and in the light it grows smaller or contracts. Now when a case comes to the general practitioner, if the eye is red or inflamed, he should test it very carefully. He probably will find the symptoms of iritis very quickly. If he cannot see that case again in the next twenty-four hours, he should be very careful how he prescribes any astringent remedies, as, under that treatment, the eye may develop iritis. He can put in something that will dilate the pupil while he is present and looking at the case, he can see that the pupil dilates, and then tell whoever is in charge of the case to keep that pupil dilated. There is no one who cannot tell a small pupil from a large one—or, to make it simpler, a small hole from a large one—and there is no need of making any mistakes in this direction. In treating eye disturbances, the cause must be removed before we can look for any permanent relief. Remove the cause and the rest is very simple, but merely putting on glasses when the eye is badly inflamed, and when there is some functional cause for it, often does more harm than good. While it may appear to help the trouble for the time being, it is quite likely aiding in the bringing about of some permanent injury to the eye. The eye is too important an organ to take any chances with. Where there is inflammation you should treat it with great caution and leave strict directions to be carried out if the case cannot be watched during the twenty-four hours as closely as you may think desirable. Care and caution are the watch-words to be used in dealing with the eyes, and this is what we ought to make our legislators understand. In order to deal successfully with disturbances of the eye, we must have a knowledge of the whole anatomy, and treat the cause rather than the effect, if we would prevent loss of vision.

And now in regard to Dr. Fisher's paper, "The Role of Nose, Throat and Ear," I wish to add my experience in regard to removing the tonsils. I presume the general practitioner advocates removing them if they appear to be the members creating a general disturbance, but I wish to enter my protest against removing the tonsils so long as they are healthy. The tonsils have a function to perform, and only so large a portion of them should be removed as has become diseased, not the whole tonsil, I am very positive. I have seen cases where the whole tonsil has been removed, and the patient has told me that they have a husky condition of the throat almost continually, that they are

unable to speak in public or to talk for any length of time without great inconvenience. It is harmful to remove the healthy tonsil, I believe. If diseased, I would remove it, the same as any other portion of the body, but unless it is diseased, it has a function to perform and ought not to be disturbed.

DR. MOULTON: I am sorry that I was unable to hear the whole of Dr. Spalding's paper. The portion I did hear was very interesting, probably most interesting to the specialist because it dealt more with rare cases than with common ones. There are a few common things that may perhaps be interesting to the general practitioner. There is one very common thing of which I want to speak that I have seen often, and I presume we have all seen it. That is a sort of paralysis of the cornea—a sort of stiffness—a disturbance which has been one of the results of typhoid fever or pneumonia, or some long illness of like nature, when the sick person has remained for a number of days with the eyes more or less open. In cases of that kind where the patient has a disease that renders them only partly conscious for a period of time, all that it is necessary to do so far as the eye is concerned, is to see that the cornea is moistened from time to time with a normal salt solution. It is very simple treatment, is sure of producing harmless results, and is, in most cases, all that is necessary to preserve the cornea.

When I had the measles, I remember, it was the proper thing to shut the patient away from the light in order to protect the eyes from harmful consequences. I was treated successfully in this way. The light was thought to be an injury to the eyes while in the diseased condition, so they kept children shut up in darkened rooms a good deal until the eyes were again restored to their normal condition. In later years, physicians have recommended the darkened rooms less than they did formerly, but I am inclined to think the darkened rooms were wise provisions. That is usually the time when the greatest change takes place in the eyes of a young person, somewhere between the ages of ten and fourteen years of age. I have noticed in a great many cases that have come before me for observation, that the eyes at times change very rapidly even in a short period of time, and these changes are likely to be very irregular and usually under bad conditions for the eyes. I think we should guard the eyes of children especially between the ages of ten and fourteen years of age when they have measles or any disease of that nature. I don't think they ought to be allowed to use their eyes for quite a period of time after one of these long continued, serious disturbances, as this is where we get lots of the cases of neuritis with more or less loss of sight which is likely to be permanent. I speak of these things because they are more or less common to me and I expect they are to a great many of our general practitioners.

In regard to the matter of removing the tonsils, I think I agree with what Dr. Holt has just said. I should not want to remove the tonsils unless they were badly diseased because I should prefer to relieve the patient in some other manner. I myself have been through all the various troubles with the tonsils as much as almost anybody, and have rather positive opinions regarding the treatment. I had one of my boys under observation for quite a time because of trouble with the tonsils. He had tonsillitis and enlargement of the cervical glands of the neck, and this enlargement remained for some months. Dr. King was inclined to think it tubercular. The tonsils were treated for some weeks pretty vigorously with the idea of reaching any tubercular trouble if the same should exist. This helped the throat very much, and in due season the swelling began to go down until it entirely disappeared. I would like to

know what was actually present to cause the condition that we had. There was a very large and prominent enlargement of the neck and the cervical glands were involved, but that has all disappeared.

DR. BOWERS: Dr. Spalding has referred in his excellent paper to one cause of eye trouble being bad teeth. I believe bad teeth are responsible for more trouble than many of us are aware at times, and that they often create serious symptoms of disease. I have in mind a case where the patient had been going to an optician for some time because of trouble with his eyes, and the optician was experimenting on him with glasses. The patient finally got so blind that the optician could not seem to get any glasses that would fit him, and in due course of time, he came in to my office. Upon an examination, I found his vision one-tenth normal in either eye. He was so blind that he had been obliged to give up work and had been a good many weeks out of work when I saw him. Looking him over carefully, I found that he had the worst mouthful of bad roots of teeth that I had ever seen. He was forty-five years of age and he had never had a tooth pulled. He had about twenty-five old roots in his mouth at that time, the crowns of which were entirely gone and in many cases the pus was running out around the roots. It was a terrible condition. I had never seen anything like it before. I suggested simply having these old roots all removed and the mouth properly cleansed and gotten into shape. The teeth were removed and within a week there was a very decided improvement in his vision, and at the present time his vision is practically normal. This condition had been going on with him for about two years and in that time he had bought glasses enough from the opticians to have paid my bill, but he could not pay it because he had bought the glasses instead.

I want to say a word also in regard to the effects of tobacco on the system which is in any way diseased, in fact it is pretty nearly a disease in itself in my opinion. I think that should be impressed on the general practitioner. I know it is hard to make some people believe that tobacco has bad effects attached to it, but I believe it is true that it does, and all the books are with me at any rate. All the authorities are against its immoderate use, or I might say, against its use. We find men occasionally losing their vision and suddenly running to an optician to get glasses. Perhaps this continues for sometime and they get so bad they can scarcely see at all. Then they go to the specialist, and we find upon inquiry that they are almost incessant users of tobacco. The vision is reduced to say one-tenth—perhaps even less than that. My experience has led me to inquire at the beginning of the examination what the habits are in relation to the use of tobacco and in a large number of cases, the patient turns out to be an excessive user of tobacco and has used it since he was very young. Now, my experience has been that, if I could make those patients give up the use of tobacco absolutely, within a month or six weeks their vision returned. I have had case after case of that sort, and if they take up the use of tobacco again, the old trouble returns.

I have been very much interested in all that has been said in these papers and in the discussion of them. There is one point upon which I wish to rest just a moment and that is the relation of the general practitioner and the specialist in these ear and eye disturbances. Why is it that the general practitioner is so slow in coming in to work with us? For instance, in my own work I refer back to the general practitioner ten cases which come to me, where the general practitioner refers one case to me. This is not as it should be. The general practitioner should work with us rather than with the optician, for since

the legislature has done what it can to bring trouble on the general community, the general practitioner ought to do his share in helping to avoid that trouble whenever he can, and to safeguard the members of the community. I see cases almost every week that have been in the hands of opticians for perhaps years and years. They tell me that their family doctor was the man who referred them to an optician in the beginning, telling them that it was not worth while to go to an eye specialist because they simply required glasses to help out a little in some direction where the vision appeared to be defective. If we could have those cases in the beginning it would simplify matters a great deal and might successfully prevent the loss of eyesight to a good many of our patients.

PRESIDENT: Does any one else wish to discuss the paper? If not, they will return to the authors for a final word, if they have anything further to say regarding them.

DR. SPALDING: I thank you very much for the discussion which has followed my paper. I understood Dr. Beach to say that almost total blindness resulted from an operation for adenoids. I should like to know how that could happen. I don't know as I have ever heard of such a case.

DR. BEACH: I shall have to admit that there is no way of proving that the blindness is the direct result of the operation for adenoids. Possibly it would have occurred if no operation had taken place, we do not know about that, of course. The patient has been at the school for the blind in Boston for nearly three years and the physicians there at the school have found no cause whatsoever for her condition, which came on immediately following the operation. There had been no indication of blindness previous to the operation.

DR. FISHER: Dr. Holt and Dr. Moulton do not favor removing the tonsils if there is any other way of removing the disturbance seemingly caused by them, and I agree with what they say. It is true, I certainly should not remove the tonsils unless I felt there was no other manner in which the trouble could be gotten at, but when the enlarged tonsils really obstruct the passage and are causing harm to the patient, they should be removed. When it is simply a temporary disturbance and the tonsils become swollen and greatly enlarged, I should expect them to shrink up and soon become corrected—that is, enlarged tonsils that are not diseased. If the tonsils are diseased I should remove them, not in part, but the whole diseased tonsil and expect good results to come from the operation. It has been my experience that the results coming from the removal of diseased tonsils have been satisfactory—much more satisfactory than allowing them to remain in the throat of the patient and cause the various kinds of disturbance or trouble that will follow.

I thank you for this discussion of my paper.

THE ETIOLOGY OF GOITER.

By DR. FRANK E. LESLIE, ANDOVER, MAINE.

Reviewing the medical literature of the past three years, one is impressed with the vast number of articles relating to endemic goiter and the fact that the writers are located in all parts of the civilized world. The most painstaking scientific investigations are being carried

out in marked contrast to the professional indifference characteristic of a generation ago in regard to abnormalities of the thyroid gland.

As yet, however, the exact cause of the disease is unknown and today one finds the most diverse ideas on the subject. It is a fact that endemic goiter occurs in every latitude, at every altitude where people live, and in all climates. However, there is an undoubted relation of the disease to locality and the influence of these locations is shown alike on human beings and the domesticated and wild animals living there. While we are to consider goiter as found in the human family, it will be of interest to mention that it has been found in dogs, cats, horses, sheep, bears, rabbits and fishes.

As every evidence of the true etiology of disease represents progress toward the ultimate control thereof, and the fact that, undoubtedly, goiter is becoming more common, is surely good reason for the increased interest in the subject. At the present time in Austria alone, there are some 17,000 people suffering from exaggerated forms of thyroid disease — goiter, myxoedema, cretinism and idiocy. It is most common in mountain districts and while the term "goiter belts" is no longer considered good phraseology, it is an established fact that certain well-defined sections show twenty to thirty per cent of the female population to be affected.

Before taking up the further consideration of etiology, let us consider briefly the physiology of the normal thyroid gland, meanwhile taking for granted that our knowledge of structure precedes our knowledge of function. The results of the investigations of Hutchinson, Frankel, Oswald and others have tended to show (1) that the thyroid gland is an organ essential to the normal metabolic activities of the body; (2) that it probably has a definite secretion; (3) that iodine is an essential constituent of this secretion; and (4) that the various anatomic changes occurring in the gland are the results of, or reactions against, general nutritional disturbances, rather than specifically thyroid in origin. Halsted's fundamental experiments have established several other important general biological facts; i. e., (1) that partial removal of the gland is followed by compensatory hyperplasia of the remaining portion; (2) that myxoedematous conditions follow the total removal of the gland and (3) that it is possible to produce, experimentally, congenital goiter by feeding thyroid extract. Drs. Marine and Williams published in the *Archives of Internal Medicine* of May, 1908, a most interesting account of analyses and experiments showing the relation of iodine to the structure of the thyroid, taking for material the thyroid glands of a series of over one hundred dogs without discrimination as to weight, age, sex or breed. As a result, they conclude (1) that iodine is necessary for normal thyroid activity; (2) that its mode of

action is probably similar to that of iron, calcium and other normal metallic constituents of the body in their relations to normal and disturbed metabolism; (3) that, as in the case of iron, so with iodine, (a) the body practices an economy in its use; (b) there is a normal minimum amount necessary for the body needs and a variable reserve quantity; and (c) a deficiency of either element induces anatomical changes in the tissues directly concerned with their storage and elaboration.

In the early period of bacteriology (1850 to '65) Virchow and Hirsch declared that goiter was due to an infecting agent of bacterial origin. Marine and Williams conclude that it should be classed as a manifestation of nutritional disturbance. McCarrison, in the *London Lancet* of January 25th, 1912, rather combines both theories by claiming that the nutritional disturbance is caused by a special bacterial agent. The very interesting work of McCarrison will be referred to later.

However, other theories have been advanced as to the cause of this nutritional abnormality. It is claimed by some to be of central nervous origin, evidence of which is shown by those cases of enlarged thyroid seen in girls at puberty, also by the fact that ninety per cent of all goiters are found in women and that many women have recurring goiters at each menstrual period or with each pregnancy. Caffein, the ingestion of which is almost universal by the drinking of coffee and tea, has been thought to be the exciting cause of nerve disturbance ending in goiter. Von Wedekind, U. S. N., has noticed the frequency of goiters in youths applying for examination preliminary to enlistment. He inaugurated a series of questions, one of which, "What beverages do you drink?" in every instance brought out an answer, "Coca cola." In examining thousands of men aged 17 to 28, this defect has caused a large number of rejections and in his opinion, the suspicion of caffein stimulation as a cause, is well founded.

NOTE.—Among the more recent suggestions, radium and radio-active waters have aroused consideration as possible factors in the genesis of goiter. Repin, of Bavaria, demonstrated that a number of well known goiter producing waters of Savoy exhibit radio-activity. However, there is much evidence to show that other factors than radio-active bodies are the probable causal agents in his series of cases.

However, for more than fifty years, the association of goiter with drinking water has seemed to show that the prime etiological factor is to be found in the water supply. The stories of the goiter-producing waters of India and the immunity of those who avoid them, and the classic experiment of Bircher in a Swiss town, where the introduction of a water supply from a non-goitrous region, was followed by a gradual drop in the proportion of goitrous school children, are

frequently quoted to support the contention that the cause of goiter is in drinking water. In Vienna, the number of cases of goiter has more than trebled during the last twenty-five years. It was thought that the water supply of the capital, coming from the mountains of the Styrian Alps, was responsible for the fact. Also the military authorities were interested in the problem, for numerous recruits had to be rejected from compulsory military service on account of goiters. Researches of Prof. von Wagner on the Carentinian Alps, have resulted in the discovery of a well, the water of which causes the appearance of goiters not only in household animals, but also in the people who drink it regularly. In the clinic of Prof. von Eiselburg, it was found that if this water was boiled, its goiter-producing quality was destroyed. It also became known that in certain parts of the Tyrolean and Italian Alps, recruits, wishing to escape military service, drank from certain springs and thus produced enlargement of the thyroid. Afterwards, if the aim was attained, they drank ordinary water and the enlargement disappeared.

Through the kindness of Dr. Gilbert, editor of the Maine Medical Journal, the writer has learned that at least seven physicians in this country have, within a year, investigated goitrous sections. In only one instance, however, has the work been taken up at the request of a medical association. Dr. Pidcock, of Ogden, Utah, at the request of the Utah State Medical Association, investigated goiter in Weber County and found it most prevalent in the North Ogden district, situated at the foot of the mountains at the north and east of Ogden, with an elevation of some 6,000 feet and a population of 1,090. He found that one-quarter of the entire female population had goiter, that nearly all of those examined were born in this section and had lived there practically all their lives. In two instances goiter had developed within three months after moving to North Ogden and drinking spring water. With the exception of two of the exophthalmic type, all the cases were of the simple colloid variety. The water supply in each instance was from springs or surface wells. A few families, using water from deep artesian wells, were free from the disease.

The recent experiments of Gaylord have shown a form of thyroid hyperplasia to exist in fishes living in certain fish ponds, which disappears when they are transferred to ponds having a different water supply.

In this State, Dr. Boothby, of Jackman, reports that in his region twenty per cent of the females have goiter. This is a mountain district, the headwaters of many of the principal rivers of New England, and the people all drink water from mountain springs and wells. He reports three cases of the exophthalmic type.

The writer takes special interest in the subject, having lived twelve years in a goitrous region located in the mountains of the northern part of Oxford County. Some 1,000 people live in the valley of the Ellis river, which rises from mountain springs and flows eighteen miles into the Androscoggin. Amongst these people, the writer has recorded 117 cases of thyroid disease, including 94 colloid, 12 vascular, 3 large cystic and 5 exophthalmic goiters, also 2 cases of myxœdema and 1 case of cretinism. With the exception of two of the exophthalmic type, all these are females—the number representing about twenty per cent of the female population. All are life long residents and the water is, in every instance, from mountain springs or wells. To ascertain just how prevalent was goiter in surrounding communities, a card was sent to each practicing physician in Oxford and Franklin counties, requesting information and from every town came reports of the presence of thyroid disease but in no instance was the number large enough to suspect an especially high per cent of the people to be affected.

NOTE.—At Hanover in Oxford, is a famous mineral spring which is being exploited commercially. To quote from a descriptive circular:

"Hanover spring water bubbles up from an immense depth in the mountain near the village. The medicinal qualities of the water were known from the earliest times, before the American Revolution, when the little hamlet was first settled. The inhabitants have always had free access to the spring and a hardier and more healthful population would be hard to find. No cases of chronic stomach or kidney complaint are known there and rheumatic troubles are also uncommon."

As medical advisor to the people of Hanover for ten years, the author is inclined to agree with the above statement, yet he knows of many cases of goiter amongst the users of this water, the analysis of which shows practically the same general composition as all the other spring waters used for general drinking purposes by the people of this goitrous region.

What reason can be given for the existence of specially goitrous sections? Before discussing this question, another should be answered, viz.: What substance in drinking water causes nutritional abnormalities of so serious a nature as to produce thyroid disease? The latest research in Bavaria seems to demonstrate that the casual agent is a purely chemical sub-stratum substance and Lobenhoffer gives a map of goitrous districts showing that the endemics correspond always to certain geologic formations from which drinking water is derived. Water from shell lime stone is the main goiter producer, but, in a milder degree, red sand stone, keuper and zech stone are also involved. He urges that an expert geologist should be consulted before any new water system is installed in goiter regions.

However, McCarrison gives the results of some most interesting experiments showing that thyroid enlargement can be experimentally produced in man within a few weeks, by the administration of the suspended matter separated by filtration from goiter producing waters. It cannot be so produced if the suspended matter is boiled. The goiter produced in this way must almost certainly be due, not to the mineral, but to the living component of the suspended matter. McCarrison's observations indicate that this living excitant of goiter exists in greatest abundance in the deposit at the bottom and sides of water channels, tanks, wells and other receptacles of goiter-producing water: (2) that this agent, when taken into the human system, has its habitat in the intestinal tract; (3) that, before being ingested, it can be destroyed by boiling; (4) that, within the system it can be destroyed by intestinal antiseptics, such as thymol and beta-naphthol, also by fresh cultures of the bacillus bulgericus. He also reports successful results from the use of a vaccine prepared from the bacteria found in the patient's own feces, also one prepared from a spore-bearing organism which was isolated from the feces of a goitrous pony.

The work done in the treatment of thyroid disease is far too extensive to be considered in this paper. Care in the selection of drinking water, boiling the water supply of goitrous regions, the use of intestinal antiseptics and autogenous vaccines, have been referred to. The use of iodine thyroid extract, electricity, the specific serum of Rogers and Beebe used in selected cases of exophthalmic goiter, and the wonderful results of the surgical work of Mayo, Halstead, Ferguson and others, can only be mentioned to show the widespread interest being taken in thyroid disease.

In conclusion, the causal agent of goiter is evidently to be found in drinking water; we venture the belief that it is a transmissible infective living organism thriving in the intestinal tract where it causes nutritional disturbances; this noxious agent must reach most of the population of a goitrous section alike, but in the majority it produces, after a time, a sort of immunity to thyroid disease; the disease is on the increase in Maine, as elsewhere, and is of enough importance to warrant scientific investigation by our State Society.

SURGICAL SUGGESTION.

In performing brisement force of a knee stiffened by prolonged immobilization in a splint or cast, the utmost caution should be observed. Under these conditions, the bones are very brittle and a fracture is easily produced.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

An Open Air School for Tuberculosis Children and Its Cost.

Since writing the editorial remarks on the question of open air and open window schools, which can be found in the current number of the Journal, we have made a brief study and investigation of the money needed to build an open air school and to maintain it in good shape for one year. We find, then, that the cost of building a standard open air school for thirty-five children will be somewhere in the neighborhood of \$600 without the land. If the land for the school and play ground is municipal, then of course no extra cost for land will have to be added to our estimate. If land has to be bought, then something fancy in the way of expenses will have to be added to the \$600 assumed. One city was able to put up an open air school for \$525, owing to the generosity of some lumber merchants who furnished material at a wholesale figure for the sake of helping out in the good fight against tuberculosis.

To this sum now, of \$600, land free, for the building we are to add \$900 for a directress, \$650 for an assistant teacher, \$300 for a matron who takes care of the cooking and dish washing, \$5 per child for cost of materials for keeping warm out of doors, making \$150, and \$600 for cost of provisions and fuel for a year for an estimate of thirty-five children. Possibly an additional estimate for the cost of transporting the children to the school might need to be added to the former sums mentioned.

In round numbers then, we reach an estimate of at least \$3,000 for building on a piece of land free and maintaining an open air school for thirty-five children for one year. During the second and third or fourth years, the cost of the original investment for the land and

building can be omitted, and thus we reach a safe estimate, year for year, succeeding until the building decays from exposure, of the sum of about \$2,500 for the number of children mentioned.

Although we do not claim that our figures and estimates are absolutely correct, yet they are near the mark and go to show that it is only large communities which can afford such a permanent yearly cost, unless friends of the good cause will come forward and help to pay the salaries, furnishings and provisions. We intend in a later issue to return to the question of the cost of furnishing and maintaining an ordinary school-room with open windows, and furthermore to report the health and educational results obtained by both the open air and the open window schools in a city of about double the population of Portland.

Vermont Medical Society.

The 100th anniversary of the Vermont Medical Society was fittingly celebrated at Burlington, Vt., Oct. 8-10. The committee on arrangements left no time to the imagination as the three days were filled from 9.30 A. M. to late in the evening with clinics and papers by such men as John B. Deever, Gilman Thompson, and other eminent members of our profession. The Burlington members even supplied noon meals at different hotels to the members and visitors.

The President's reception and ball was held on the first night and the annual banquet on the second. It may be of interest to note two things, viz.: ladies at the annual banquet and the absence of liquors at all its functions. This latter seemed strange in a license State as contrasted with our prohibition State.

Dr. Craig, Secretary of the A. M. A., was present at the meeting and was one of the speakers at the banquet, outlining in an interesting manner the work of the association.

Drs. Stone (Pres.) and Beecher (Sec.) received the unanimous vote and thanks from the society for their earnest efforts tending toward the success of this meeting. A vote of thanks was also given to the Burlington members for their generous entertainment of the members and their wives.

It was voted that the fiscal year be changed to correspond with the calendar year and henceforth all dues must be paid on or before March 31. After considerable discussion, it was voted to maintain the medico-legal defense of the society, and when it came to a vote the question was decided unanimously in its favor. All of the out-of-the-State speakers were made honorary members. It was also voted that all members over 65 years of age, who had been members of good

standing in the State and county organizations for the past five years, should be members without payment of dues henceforth.

The following officers were elected: President, A. L. Miner, of Bellows Falls; vice-president, Grace Sherwood of St. Albans; secretary, J. M. Hamilton of Rutland; treasurer, C. F. Dalton of Burlington; auditor, C. F. Ball of Rutland.

Open Air or Open Window Schools for Tuberculosis Children.

People of today rush unthinkingly into every novelty. Just at present we rush, or are being rushed by other enthusiasts, into all sorts of untested fancies in the anti-tuberculous direction. The open air school is one of the latest freaks urged incessantly upon tax payers, although the results of such schools in other States than in Maine have not yet proved superior to other methods of education and prevention, or of permanent value in the cure of tuberculosis. We hope, indeed, that they will prove advantageous, in time, but before entering in upon the large expenses which they involve, let us look at the question from various points of view.

Whilst thinking whether some sort of arrangements might not be made in our present schoolhouses to prepare them for occupancy by the tuberculous children of the community, we read with great pleasure in the *Boston Medical and Surgical Journal*, a very competent paper by Dr. Rice of Springfield, Massachusetts, in which he stands forth as a champion of the open window school, as against the open air school because it affords as much benefit to the improvement of the tuberculous as the much more expensive open air school.

An open window school, as its name implies, consists in utilizing, as Dr. Rice points out, any ordinary school-room provided with abundance of light and exposed to the sun, and in letting in fresh air through wide opened windows properly screened to guard from draughts and to keep out rain and snow. From a hygienic point of view, such rooms are as healthy as open air schools, the marked improvement in the condition of children using them, comparing favorably with those educated in open air schools built on the latest sanitary plans.

If a community utilizes its present school buildings as suggested, they avoid the expense of an open air school with its expensive roof and super roof, and a large sum for equipments such as coverings, felt boots, blankets, sitting out bags, cooking utensils, places for preparing food, and a warm place in which to serve it. Then, too, the open window school calls for slight expense in comparison with the open air school in the matter of arranging the windows with cheese cloths, and window strips for ventilation and keeping out snow or rain.

The cost of maintaining the open air school is large, for there must be a very competent teacher at a high salary, there will be the cost of bringing the children in from an extensive circle of territory, there will be the time lost in transit, and the children coming from afar cannot go home to their mid-day meal and must be fed. The wages of a cook to furnish their food, the cost of the food, the wages of a dish washer and the cost of hot water for this purpose, all together, have to be considered, in the question of building an up-to-date open air school.

Educationally, the open air schools will necessarily leave much to be desired, because the children attending them will be of so different grading, capacity, teachability and so on, that hardly a single teacher could arrange many scholars in educational groups, and carry them along successfully.

Morally, open air schools are in a way, bad, because they emphasize to too high a degree, all physical training. They lead children to become conscious of their bodily defect. Such children, knowing themselves to be DIFFERENT from other children, come to demand more than other children demand from the community in which they live. Finding that they are given unnatural time to sleep, and that they are reared and clothed at the expense of somebody else, they grow up to feel that the world owes them a living, and must go on supporting them all of their lives.

It is well enough to teach children cleanliness and table manners in any schools, but if such instruction ever succeeds at all, it means, indeed, intolerance of uncleanness, and of bad manners at home, but additionally, intolerance of home itself.

Without carrying discussion too far on this occasion it may be said, in general, that the question between two sorts of schools for tuberculosis children is worth while studying carefully. The open window school should be tried first. Meanwhile, study should be made of the expenses involved in constructing a standard open air school, and of its maintenance afterward at so much for each child, including all costs for travel and food. In our opinion, nothing is too good for the means of preventing and curing tuberculosis, but it is bad policy to experiment with schemes, which, so far as we know, have not yet proved of value, proportionate to the large expense involved.

The Vision of Aviators.

The vision and general condition of the refraction of the eyes of air travelers is being much discussed at present in foreign lands. It is generally considered after much discussion, pro and con, that the sight of men who drive aeroplanes need not be anywhere near as normal as on the earth, because in aerial traveling there is nothing present for

comparison as to size, or distance, or any objects much in view necessitating accurate control of the machine to prevent accidents from collisions. Aerial drivers with vision of even one-fifth to one-tenth of normal can drive any aeroplane successfully and safely and without danger to themselves or their passengers, so far as actual sight is concerned. For snow, rain, hail, and so on, in the air, reduce the sight of those provided with lenses so much below the normal that they are practically useless, and a driver without lenses is more reliable than one who uses lenses to make his earthly vision perfect.

The latest suggestion regarding the examination for fitness of aeroplane drivers is that there should be a commission of special surgeons, consisting of a neurologist, physiologist, and then of a nose and throat surgeon and finally of an oculist to go all over the ground thoroughly and decide on the proper examination of men who apply for this rather dangerous trade, and to license them accordingly.

Esperanto in Medical Germany.

A tremendous effort is now being made in German medical and surgical circles to forward the study of Esperanto as a world speech in future medical and surgical congresses of an international character. One of the chief reasons advanced is the alleged German hatred of English, and to such an extent does this spread amongst physicians that they claim to prefer Esperanto, an artificial language, to English, which is spoken by their enemies, but which is sure to become the world speech for all educated persons. This condition John Fiske preached in Portland years ago, and his prophecy is surely reaching fulfillment, its rapidity of achievement increasing with the introduction of the ubiquitous telephone into every civilized family throughout the enlightened world.

German physicians and surgeons recognize the impossibility of their difficult language ever becoming the world speech, or even of becoming the chief medium at International Medical Congresses. Recognizing the impossible situation, they now favor Esperanto rather than the English of their asserted enemies. This party of Esperantists is quite numerous, and contributes largely to the current Esperantist-Medical literary strife.

On the contrary, other famous German physicians and surgeons favor English as the chief medium of international medical speech, and are as fierce against Esperanto, as their opponents remain against English. They base their opposition to Esperanto on the ground that this artificial language is founded on the Romance languages, Latin, French, Italian and Spanish. Germans, they say, should just as much

hate a language founded on the speech of their enemies on the South and West, as to hate the English of their Anglo Saxon enemies.

We have made many efforts to study the actual value of Esperanto but have never been able to convince ourselves that it was worth the time, until its literature advanced. That literature at present consists largely of mere translations of essays and books from foreign languages, easily accessible to the educated and much more preferable in point of accuracy of diction in the original. Medical literature written in Esperanto is so far of the thinnest sort, and actual original literature in that artificial tongue is mostly of very evanescent character. Meanwhile another artificial language is promised, as near at hand. Will it push Esperanto to the wall, as half a dozen other languages have pushed aside the Volapex of several years ago? It is a standing joke that when Esperantists meet, the first thing that they say to one another is, "How are you today?" Whether true or not, Esperanto seems to be gaining some ground with people who are too lazy to study, and too indifferent to the beauties of genuine languages like French, German, Italian and Spanish, to take the necessary trouble to learn them. To claim permanent value for Esperanto because "It is easy to learn," is saying very little in its favor.

The Correspondence School System of Educating Trained Nurses.

Those of the profession or the laity who have been inclined to sniff rather loudly at any such effective education as might be furnished by the correspondence school system of educating trained nurses will find a considerably opportunity for them to change their minds after reading the report of a New York Commission, consisting of medical editors and skilled physicians, bearing upon this topic. For, from this paper, we learn with considerable surprise, we must confess, that a high degree of efficiency can be obtained and has proved possible to be obtained after a thorough examination by these competent men. Admitting that hospital experience is advisable and proper, and indispensable in many instances, yet the results shown by examination of the methods of correspondence teaching prove that nurses educated by such a system can be of immense advantage to the community. There are not enough hospital trained nurses to do all that is demanded in the way of nursing. The wages asked by nurses trained in hospitals often prevent people of moderate means from obtaining what they need. Therefore they are compelled to rely on nurses who have learned considerable from the correspondence school system. It was shown to the committee that the entrance examination at these schools was stiff,

and that more than half of the applicants were turned down. It was also proved that the examinations were very difficult, so much so that not more than 60% of the students were passed as competent. The system also opens a field for women of middle age who often become in this way, what are styled excellent home-nurses, capable of taking care of invalids and feeble children when trained nurses from the hospitals could not be of much benefit at their higher wages.

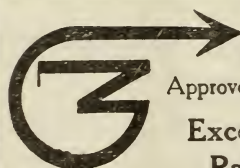
The conclusions of the committee, generally speaking, were that the correspondence schools produced a high quality of mental adaptability in women to do well *under a physician's directions*; that all nurses so educated should receive a legal certificate as practical nurses, and that nurses who had passed their three years' courses in hospitals should be legally certified as trained nurses, with the name of the hospital appended. From amongst such sorts of nurses, let the people choose such as they demanded, or as the physician in charge of the patient suggested, urged or advised.

An Improvement on "Roentgenologist."

Roentgen did indeed discover those wonderful X-Rays which have been of so much value and will continue to increase in therapeutic usefulness as time goes on. It is, however, doubtful, if the discoverer ever thought that his name would become so famous that medical men and others who utilize his rays would band themselves together as a clan, beneath the banner of "Roentgenologists." But so it has come to pass, and the adventurous specialist in X-Rays finds himself burdened with a name exceedingly long, and difficult to pronounce at all; a Roentgenologist. Now as Roentgen will never be forgotten so long as light endures upon this terrestrial sphere, why not invent or suggest for his worshippers a name that shall be more simple and easy to recall, or to read, pronounce, or write or print? So, happening just now to read a report of these specialists in Rays, and a suggestion for a new protecting glove, the idea flashed across us like a Roentgen Ray, why not call these specialists, "X-perts?" We give the suggestion for what it is worth, and if X-perts do not fancy it, let them consider our extra offer of another name, "The Raymen." Satisfied with two suggestions in one brief editorial note, we call professional attention to the matter and call for names, perhaps still more appropriate.

A Spanish Love Affair and a Curious Malpractice Suit.

A Spanish actress had two admirers suing for her hand, but she could not decide which one to accept. One was a diplomatist, the other a surgeon. The two men finally fought a duel to decide which should have the first chance to offer himself to the charming creature. The diplomat was wounded in the leg and the actress was planning to marry him, for his misfortunes, when alleged gangrene set in. Thereupon she urged the surgeon to give her up for good, to cure the wounded man, and to let her marry him after all that he had suffered for her. The surgeon agreed to attend and to operate if necessary, and, as the wound behaved badly, the leg was finally amputated. When the actress heard of this she resolutely declined to marry a man with one leg only, and to put him out of the running entirely, she married the fortunate surgeon. This was no sooner accomplished than the diplomat brought suit for damages in a large amount against the surgeon, claiming malpractice in amputating a leg that might have been saved; to say nothing of losing in a love affair. The jury, at last reports, had failed to agree, on the first trial.



Tested
professionally—
Approved professionally.

**Exceptionally
Palatable,
Digestible, Dependable.**

Physicians have been able to prescribe to advantage

Hydroleine

in cases in which cod-liver oil is indicated. Hydroleine is pure Norwegian cod-liver oil emulsified in a manner which makes it extremely utilizable. It is without medicinal admixture. Sold by druggists.

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York

Sample will be sent to physicians on request.

Necrology.

EDWIN MOTLEY FULLER

Dr. Fuller, the son of Alden Fuller of Portland, was born in that city, January 8, 1850, but removed with his parents to Turner, Maine, at an early age, and was educated there in the common schools. He obtained some classical education elsewhere, and was honored by Tufts College with an honorary degree of Master of Arts. He studied medicine at the Medical School of Maine, at Brunswick, and was graduated from that institution with high honors in 1873. He soon married and settled in Bath, where, with slight vacations for recreation, he practiced the rest of his life, more than forty years.

He was on the first of August of this present year apparently in the best of health, though somewhat mentally worried by the death of his wife some months before, when in dressing a septic abscess he accidentally infected his right hand. Septicæmia soon set in, and on August 8th he ceased to labor. He left a son, Dr. E. Motley Fuller, Jr., who follows in his father's footsteps in medical practice.

Dr. Fuller, Senior, was a man of exceeding ability in many directions, and became well known all over the State from his connection with the medical department of the militia of Maine. He rose in various capacities of this service to the rank of Lt. Colonel shortly before his lamented death. He was also a Mason and member of Friendly Societies, but we are more inclined to emphasize his membership in local, county, State and American Medical Associations. He occupied in 1891-2, the high position of President of this Association. His address at the annual meeting over which he presided was able in style, stimulating in thought, and impressive in delivery.

Amongst his most valuable contributions to the Transactions of the Maine Medical Association, were a paper on "Typhoid Fever," with many suggestive and fresh ideas for treatment of this autumnal plague, and another "On Goitre," with novel suggestions regarding its diagnosis, treatment and cure. His description in this paper of a new murmur, which he entitled "The Sleigh Runner Murmur" attained world established permanence in medical diagnosis. He also once delivered the annual oration before our members, taking as his subject "Pedigree in Health and in Disease," which was a well written essay, illustrated with a wealth of literary learning proving the varied influences of heredity. In a word, all of Dr. Fuller's papers testified to the well and broadly developed mind of our recent associate.

Resolutions on the Death of Ambrose Herbert Weeks.

At the last annual meeting of the Maine Medical Association, the action of the house of delegates in appointing a committee to make a special record of the feeling of his fellow members concerning Dr. Weeks, testified to the genuine sorrow expressed on every hand. In three counties of the State, Dr. Weeks had practiced his profession so loyally, so considerately, and so well, that his associates, without exception, felt toward him increasing respect and affection.

In the months that have now passed, the hospital staff and various societies and clubs have given expression to their regard; but the estimate of his character as a man and of his worth as a physician grows larger with the lapse of time.

The Maine Medical Association has lost a most able, useful and well-beloved member. It would be hard to find in our ranks, among the dead or among the living, a better example of steadfast, honorable achievement.

ADDISON S. THAYER,
FRED P. WEBSTER,

Committee.

Portland, October 4, 1913.

SURGICAL SUGGESTIONS.

Marked post-operative abdominal distension with nausea, belching and increasing prostration are strongly suggestive of acute dilation of the stomach. The stomach tube and lavage are indicated as they are also in repeated post-operative vomiting.

Too often the fact is overlooked that, even in the absence of a visible scalp lesion, pediculosis capitis may cause painful swelling of the posterior glands of the neck, with or without cellulitis (resembling the swelling over an inflamed mastoid) and fever.

Typhoid.

The following statement has been submitted by Dr. F. E. Carmichael, city physician, in reference to the typhoid situation:

1912, August, 64 cases.	Sept. 1st to 25th, 39 cases
1913, August, 15 cases.	Sept. 1st to 25th, 11 cases

Every effort is being made to locate the cause by looking after both water and milk.

County News.

CUMBERLAND. PORTLAND MEDICAL CLUB.

The eighth meeting of the year was held at the Columbia Hotel on October 2nd, with twenty-six members present.

Drs. Pudor and Swasey, committee on resolutions on the death of Dr. Ambrose H. Weeks, presented their report, which was unanimously adopted by the club.

Whereas, in accordance with the higher dispensations of all earthly events, we, the members of the Portland Medical Club, have been called upon to sever our earthly relations with our beloved and highly esteemed brother, Dr. Ambrose H. Weeks, be it therefore

Resolved: that we, the members of this Club, desire hereby to express our deep sense of loss of one so worthy of our affection and regard, and that we desire also to extend our deepest sympathy to his wife and immediate friends in their great loss.

Resolved: that a copy of these resolutions be forwarded to his family and also recorded in the minutes of this Society.

In the place of the usual paper, arrangements had been made for several members to report interesting cases which had occurred in their practices.

Dr. Jordan reported the case of a man with supposed hydrocele which was not relieved by several attempts at tapping, but which disappeared spontaneously a few hours later and had not returned: also the case of a child of two and one-half years with bronchopneumonia.

Dr. Milliken followed with an interesting talk on Friedmann and the so-called "Friedmann cure" for tuberculosis as it is regarded by some of the foremost medical men in Germany.

Dr. Warren presented three cases of toxemia of pregnancy, in one of which labor was induced at the twenty-ninth week, and in the other two curettage was performed at seven weeks.

Dr. Burr reported a case of intestinal sand which was extremely interesting and well worked out. He also exhibited several specimens.

Dr. Adam P. Leighton, Jr., reported a case of painless labor in a young girl.

R. B. MOORE, *Secretary*.

KENNEBEC.

The regular quarterly meeting of the Kennebec County Medical Association was held at the Augusta House, Augusta, Me., Friday evening, October 24th, 1913, and State President, Dr. Peters, was present

and discussed impending medical legislation and also the work of the members in the control of tuberculosis.

The paper of the evening on "Present Day Obstetrics," was presented by Dr. Nathaniel R. Mason of Boston. Dr. Mason discussed the use of pituitary extract, the dilating bag, and the transfusion of blood. A vote of thanks was extended to Dr. Mason for his instructive presentation.

The following resolution concerning the death of Dr. A. A. Downs, one of the members of our society, was adopted:

"Whereas for another time death has entered into our ranks and removed our colleague Dr. A. A. Downs of Fairfield: We, as an association, wish to express at this meeting our appreciation of his sincerity of purpose and enthusiasm to which he gave himself to his work in his chosen field, that of tuberculosis. It is especially sad for one who was practically on the threshold of his life's work to be thus taken away. We as an association, regret his untimely death and it is

Resolved that this expression be spread upon the records and a copy be sent to his widow."

Three physicians were elected to membership.

HENRY MILLER, *County Editor.*

PENOBSCOT.

The monthly meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday evening, October twenty-first.

After a business meeting, at which Dr. S. W. Otis of Carmel was elected a member, the members adjourned to the dining-room, where to the sound of music, a delicious banquet was enjoyed. We were disappointed that Judge Warren C. Philbrook of the Supreme Judicial Court was unable to be with us. However, a social time was enjoyed and the following resolution passed:

Resolved that it is the sense of the Penobscot County Medical Association that an Osteopathic member be appointed to the Board of Registration.

It was thought that as the Osteopaths are seeking a board of their own with requirements the same as the present board, with the exception of major surgery and therapeutics, that the better way out would be to allow them a member on our Board. Then, if they were qualified, as they claim to be, let them pass the examinations just like any other doctor, with the exception of therapeutics. They will make strong objections, but it is certainly a fair proposition.

JOHN B. THOMPSON, *County Editor.*

YORK.

The 74th quarterly session of the York Co. Medical Society was held in the town hall in Sanford, Thursday, Oct. 23. Dr. L. E. Willard of Saco, presided. The minutes of the June meeting were read and approved. Three applications for membership were reported to the Board of Censors.

The subject of contract and lodge practice was again brought up for discussion, and several members spoke. All are in favor of discontinuing any method of contract and lodge practice that is open to criticism on account of reduced fees received. The discussion was friendly and the matter has been adjusted satisfactorily.

Dinner was enjoyed at Hotel Sanford.

Dr. W. Bean Moulton of Portland, who was to have read a paper, sent a telegram that it was impossible, much to his regret, to be present.

Dr. Wm. C. Peters of Bangor, President of the Maine Medical Association, was the guest of the society and he gave an interesting talk on various matters. He explained the work undertaken by the Maine State Anti-tuberculosis society, and recommended the appointment of two members of the county medical society on the board of directors of local anti-tuberculosis in any county. The subject of osteopathy was presented also, and Dr. Peters regards it as being advisable to allow the osteopaths to have one representative on the State board of medical registration.

Dr. Peters also gave an instructive discourse on "Fractures," for he has a continuous service in that department at the Eastern Maine General Hospital.

It was voted to postpone action on the subjects of anti-tuberculosis work and osteopathy until our January meeting. It was voted to send a letter of sympathy to Dr. A. G. Wiley of Bar Mills who has been seriously ill for several weeks, but is now improving, and a vote of thanks was extended to Dr. Peters and those who arranged such a good and successful meeting. Adjournment at 3.30 p. m.

Those present: Drs. Wm. C. Peters, Bangor; L. E. Willard, Saco; C. J. Emery, M. H. Ferguson, J. M. O'Connor, F. E. Small, C. F. Kendall, D. E. Dolloff, C. F. Traynor, A. C. Maynard, Biddeford; R. S. Gove, C. W. Blagdon, D. W. Wentworth, S. C. Hill, W. H. Kelly, J. N. L'Heureux, A. Lamoreux, Sanford; B. M. Moulton, L. W. Parody, Springvale; E. C. Cook, F. W. Smith, York Village; J. W. Gordon, W. W. Smith, Ogunquit; W. W. Varrell, York Harbor; H. L. Prescott, Kennebunkport; C. E. Lander, S. B. Marshall, Alfred; A. S. Davis, Maplewood; J. A. Randall, A. L. Jones, Old Orchard.

A. L. JONES, *County Editor*.

Personal News and Notes.

Dr. J. A. Randall of Old Orchard is having a vacation in the upper part of York County and he will put in some time hunting for big game.

Dr. and Mrs. L. L. Powell of Saco returned to that city, Oct. 23rd, having made a trip of 500 miles by automobile through eastern Maine. Dr. Powell did some hunting and shot a five point buck.

Book Review.

The Night Nurse.

A novel by an unknown author. Reprinted from the English edition by E. P. Dutton and Co., N. Y.

English and American novelists too, being apparently in dearth of other new topics for fiction are at this juncture devoting considerable exertions to the study, career and matrimonial adventures of trained nurses. A great deal that is written concerning them remains pure, unadulterated, and exaggerated fiction. We lately called attention in these columns to a novel entitled "Dr. Weaver's Career," in which the head nurse of a private hospital for throat patients played a very prominent and exceedingly emotional part. In the present work now lying before us, "The Night Nurse," the career of two rival nurses in an Irish hospital is depicted day by day with amazing accuracy. Rivals, we say, because two of these young and fascinating young women are rivals for the affections of an interne in their own hospital. The intricacies developing all round, in the love affairs of these three people, are well worth spending some few hours in reading, chiefly for the sake of comparison of home, with foreign, hospital conditions and affairs. American novels treat widely of robberies, dynamitings, wild rides on horse-back and offer a succession of thrilling situations whilst in the "Night Nurse" we meet with nothing more stirring than an account of emergency operations, and the excellently well described epidemic of Typhus in an Irish village. The novel is clean and interesting, scandals are few, delicately handled, and the one great love theme permeating the entire book is well managed from start to finish. We cheerfully recommend novel readers of the profession to open the covers of "The Night Nurse," for they will be amused and exhilarated.

J. A. S.

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

DEC., 1913.

No. 5

*ARTIFICIAL PNEUMOTHORAX.

BY FRANCIS J. WELCH, M. D., PORTLAND, ME.

Artificial pneumothorax as a treatment of tuberculosis is an operation to induce compression of the diseased lung for an indefinite period by repeated injections of a slowly absorbable gas into the pleural cavity. Sterilized atmospheric air, oxygen, or nitrogen may be used but the latter is preferred because it is absorbed more rapidly.

The essential point in artificial pneumothorax is rest of the lung. It has been generally observed that rest is as important to the diseased lung as it is in any tuberculous infection. The rest demanded by nature is illustrated by the relief from pain that is obtained by the use of the plaster cast in tuberculosis of the knee joint or hip joint, by strapping the chest in acute pleurisy and by rest in all inflammatory conditions. This is also shown in the restriction of the diseased lung by the impaired mobility of the chest wall of the affected side and the subsequent flattening of the normal convexity. Likewise a pleural effusion may occur thus further immobilizing it. Spengler, Adams, West, and Forlanini advise appreciation of this condition. When the fluid appears, there is often a decrease of fever, cough and sputum with a decided improvement of the patient. If aspirated wholly the symptoms recur and often hasten death.

Spontaneous pneumothorax has been shown in some cases to be a very favorable occurrence on account of the consequent rest of the lung. In six of Spengler's ten cases complicated with hydrothorax and pneumothorax, complete recovery ensued. In these cases the

*Read before the Maine Medical Association, July, 1913.

fluid was allowed to accumulate until excessive and then withdrawn in small quantities. A few operators have resected large portions of many ribs to imitate nature's method of restriction of the chest wall with success in those patients that survived the operation. Such successes as these corroborate the rationale of artificial pneumothorax treatment and were the basis for experimentation by early operators.

In 1833, Morton of Philadelphia mentioned artificial pneumothorax. In 1882, Carlo Forlanini of Pavia, Italy, proposed a theory of compression of the lung by a closed artificial pneumothorax and made many experiments on animals and human beings. In 1898, he reported the first clinical cure of an advanced unilateral case. This was a case that had developed a spontaneous pneumothorax and was compressed by repeated injections. In 1898, J. B. Murphy, in the American Medical Association surgical oration working independently reported five unilateral cases with details of his method. Lemke continued Murphy's work until his death in 1901; Schnell of Indiana reported a cure of hemoptysis in 1898 in which artificial pneumothorax had been induced. In 1906, Prof. Ludolph Brauer, Spengler and Adolph Schmidt in Germany took up the work along the lines proposed by Murphy and have since continued it. Among other foreign observers may be mentioned Dumarest and Dessier in France, Christopher Saugman in Denmark, who added the manometer to the Forlanini instrument. In America, excluding the work of Harris and Mary Lapham, there was little interest noted until 1911, when Robinson and Floyd reported a series of 28 cases, extending over two and one-half years. Since then, Balboni, Sloane and Hamman, Mary E. Lapham, Balwin, King, Knopf, Miller and many others have taken up the work. As a matter of interest Brauer has lately reported a bibliography of more than 400 works, thus showing the interest in the subject abroad.

PATHOLOGY.

In reference to the pathology, there are few cases with autopsy records. Graetz and Forlanini agree that as a result of artificial pneumothorax treatment tuberculosis cavities become smaller, contain fewer bacilli and are surrounded by connective tissue, showing an attempt at healing. Old caseous areas show evidence of cicatrization with consequent contraction and there appears a marked healing of inflamed tissues surrounding the blood vessels and bronchi. Atelectasis is noted which restricts the lymph system, thus hindering the spread of bacteria and aiding in the formation of connective tissue.

THEORIES OF ACTION.

What is the cause of these changes in the diseased condition? There are two theories of action, mechanical and circulatory. The mechanical action is from the compression of the lung by the pneumothorax which causes evacuation of contents and reduction of the cavities with consequent contact and healing of the walls according to the rule of surgical therapy. Also the diminished amount of retained tuberculous material and the lessened activity of the lung are factors in preventing further spread of the disease. Although the pulmonary circulation is readily accustomed to the changes there is a lymphstasis which is demonstrated by the fall in temperature, reduced night sweats and a rise in the opsonic index. (Pigger)

INDICATIONS AND CONTRA-INDICATIONS.

The ideal indication for artificial pneumothorax is the patient with unilateral involvement and free pleura, who is not gaining under the generally accepted methods of treatment, and whose condition does not contra-indicate the treatment. These cases are generally moderately advanced or advanced. There are comparatively few cases of this sort because most of the cases that are found advisable for pneumothorax treatment have bilateral involvement. Bilateral cases, even when advanced, often offer good indications and obtain symptomatic relief which no other known method would furnish. Earlier cases that are not responding to treatment and whose resistance is low or whose mental condition requires it make acceptable patients. In many cases of this class, it is impossible for them, financially or for other reasons, to take the ordinary treatment, or to improve if they do take it. Hemorrhage cases that do not improve under proper medical treatment and in whom the disease has not progressed too far offer brilliant results and also in cases with chronic hemorrhagic expectoration where the pleura is free. Pleural adhesions are the *bête noir* of successful pneumothorax treatment and control the extent of the lung compression. When they are situated in the upper part of the chest the results are good. When they are located inferiorly, the results depend on the extent of the adhesions as to whether or not they allow separation of the lower lobe from the diaphragm or simply allow the nitrogen to course the periphery. Often no pleural cavity is found on account of the adhesions or union of the leaves of the pleura. It is interesting to note the slight degree of dullness on delicate light percussion after attempting to locate a pleural cavity which has long since departed,—a point which was not so evident on the former examination. As long as the nitrogen

is not admitted there is no danger in these attempts. In many cases, the adhesions give under tension and allow considerable more gas at successive injections. These are perhaps separated by coughing attacks in the interim. As regards the selection of cases, Robinson and Floyd say that "a distinction shall be made between those cases which are evidently not responding to hygienic treatment and are then regarded as hopeless and those very advanced cases which are rapidly approaching their termination. In the former group, the patients should be treated with pneumothorax; the latter also perhaps for symptomatic relief but not with the hope of arresting the disease." In bronchiectasis and lung abscesses, good results have been obtained.

The contra-indications as enumerated by Balboni are 1st: Union of the leaves of the pleura and extensive pleural adhesions.

2nd. Grave lesions in other organs as cardiac or renal.

3d. The acute bilateral forms of phthisis.

4th. Extensive destruction of pulmonary tissue in the lung, which is in better condition.

5th. Emphysema and splachnoptosis.

To these Knopf adds:

6th. Dry pleurisy or pleurisy with effusion.

7th. Any pulmonary tuberculosis complicated by any constitutional disease which is in itself sufficient to inhibit all possible chances of recovery.

8th. When the patient, in no matter what stage of the disease, is too apprehensive and strongly objects to the operation, it should not be resorted to.

TECHNIC AND RESULTS.

There are two methods in vogue for inducing pneumothorax, namely, thoracotomy or thoracentesis. The Murphy-Brauer method, so called, or thoracotomy is performed by making a small incision through the skin muscle and fascia layers thus exposing the parietal pleura which is entered by a blunt needle. The Forlanini method or thoracentesis is performed by introducing through an intercostal space a small caliber aspirating needle connected with a suitable apparatus and gradually forcing it inward until the reading of the manometer on the instrument shows that the pleural cavity has been entered. The parts are anaesthetized as in the Brauer method. The incision in the Brauer method is used only at the first injection because the pneumothorax obtained prevents subsequent injury. The advantages of this method is its safety, enabling the operator to see the pleura and noting whether it is transparent or opaque, noting thickness of the pleura or

adhesions, also the free movement of the lung within it. Its disadvantages are the time demanded, as it is a thoroughly aseptic operation, and its momentity to the patient and the prevalence of subcutaneous or deep emphysema as a complication. The intercostal muscles must be sutured over the needle hole in the pleura by the Brauer method, and until these adhere there may be a leakage resulting in emphysema, an uncomfortable if not serious condition. The disadvantages of the Brauer method are the advantages of the Forlanini. It can be done anywhere. It is not of much concern to the patient and rarely results in emphysema. The main point at issue is to avoid entering the lung. If caution is used and the manometer closely watched there is rarely any danger by the Forlanini method.

There are different forms of apparatus for nitrogen injection each involving the same principles. The Forlanini, the Brauer-Spengler modification of the Murphy instrument, and the Robinson apparatus. The Robinson apparatus consists of two bottles of 3500cc. capacity, one of which is stationary and filled with water containing two drams of pyrogalllic acid to take up the oxygen that might enter. By proper arrangement of stop-cocks, nitrogen is forced into this bottle, displacing the pyrogalllic acid into the other bottle and is retained therein. The difference in the level of the two liquids denotes the pressure under which the nitrogen flows, and the opening in the cocks the rapidity. When the second bottle is full, the pressure is about 14cc of water. These bottles are attached to a backboard and the second may be moved up, thus increasing the distance between the two liquids and the pressure.

On the left of the first bottle and connecting with the tubing coming from it, is the manometer, a U shaped tube, containing water and controlled by a suitable stop-cock.

One arm of this tube shows positive and the other negative pressure, when oscillations denote that the pleural cavity has been reached. There is a scale at the side to denote the degree of pressure. At the distal end of the tubing to which the rubber connection with the needle is made, there has been a modification by Balboni by the addition of a filter filled with sterilized cotton which may demonstrate its worth if blood or pus, as in a pyopneumothorax, should flow back in the tube. The needle used is Balboni's modification of Floyd's needle. This is a Y shaped needle with obturator on the upper segment and a connection for the rubber tubing on the lower part of the apparatus. A suitable stop-cock controls the entrance of the nitrogen. There is a metal pointer on the nitrogen bottle which aids in estimating the quantity of nitrogen injected, which is shown by graduated spaces on the bottle, each of which represents 50cc.

For the first treatment it is better to have the patient at home or in a hospital, and, if convenient, to arrange it for morning, as the patient is in better condition at that time. During the menstrual period, it is advisable to discontinue the treatment. Any intercostal space below the third rib, where the pleura is free and the lung movable, may be chosen. The percussion, note especially light percussion, will aid in detecting thickened pleura and adhesions or tuberculous consolidation. Thickened pleura of itself does not augur failure. The sound most nearly approaching normal resonance gives the cue. The stethoscope may tell whether the lung is fixed or not. If the process is confined to the upper lobe, the mid-axillary line should be chosen. If situated anteriorly the anterior axillary or nipple line: if situated posteriorly, the scapular line.

A careful physical examination is made, noting well the condition and location of the heart. Balboni advises an X-ray at the beginning and during the course of the treatment. The patient may be placed in a recumbent position on a bed or an operating table with the arm raised. At subsequent injections, the patient may be seated on a chair. It is well to have an understanding with the patient that on the first inclination to cough or on the appearance of pain, the operator should be informed that he may shut off the nitrogen. It does not harm the patient, if he must cough, to keep the needle in position so long as the nitrogen is shut off. The place of injection having been selected, the part is aseptically prepared for the operation and the skin anaesthetized with Ethyl chloride. A common glass hypodermic syringe, properly sterilized, with a long, well fortified needle, is filled with the anaesthetizing solution. This may consist of

Rx. Novococain. j - x.

Sol. Adrenaline Chloride (1 - 1000)M xv.

Aqua Dist. Qs. ad. 3 Tn.

The deeper tissues should be injected slowly. If pleural adhesions exist, one-eighth morphine may be added, or morphine and atropine may precede, if the patient is very nervous. It is well to keep good control of the patient because if he moves, the plane of deeper injection may be shifted. After a few minutes the pneumothorax needle attached to the rubber tubing of the apparatus may be inserted slowly. After a certain distance is reached the stilette in the upper segment may be removed and the needle connected by turning the stop-cocks to the manometer.

Then the needle is pushed in until the parietal pleura is punctured, which is felt by the vibration of the needle and the lack of resistance that follows, as in thoracentesis. In the latter, there is a

cavity and in the former there is a virtual cavity but the two pleural layers are in such direct contact by capillarity that it is hard to distinguish it. If the point of the needle is in the pleural cavity, there will be respiratory oscillations shown in the manometer and the pressure will be negative. This is the key to the situation. The normal intrathoracic pressure is negative corresponding to about 7mm of mercury. It varies in different conditions of pressure in individuals taking the pneumothorax treatment. If there is negative pressure of the manometer and no oscillations, the parietal pleura has not been perforated. Sometimes the pleura may be penetrated and no oscillations result. This may be due to obstruction in the needle which may be remedied by introducing the stilette. When the needle is in a sub-pleural space, there may be oscillations and positive pressure. If nitrogen is admitted, deep emphysema may ensue with resulting discomfiture, constriction of throat, squeaky voice, etc. Sometimes the needle may be in the pleural cavity and no oscillations ensue. This is on account of the adhesions. Where the needle is in the lung, there is no negative pressure and no oscillations. This may be immediately followed by hemoptysis or there may be no sequelae. To reiterate — it is wise to know and watch the manometer and remember that if there is a negative pressure with respiratory oscillations, there is no probability of danger. Where the conditions above are observed, nitrogen may be introduced.

At the first treatment, a moderate amount of nitrogen should be injected — any amount from 50 cc. to 500 cc. As much as 1000 cc. and more may be injected at subsequent treatments, depending upon the condition of the patient. Generally about 50 cc. per minute should be injected at a pressure from 6 to 12 cc. of water. It is wise not to allow the nitrogen to enter too rapidly. This may be controlled by stop-cocks and by regulating the difference between the two water levels of the Robinson apparatus. The intra-thoracic pressure should be measured after the injection of every 200 cc. When enough has been injected, the nitrogen is permanently shut off and firm compression is made over the point of injection to prevent the escape of the gas. The skin is sealed with collodion.

The frequency of the injections vary from a few days or a week to a month or more, depending upon the case. In an advanced case, more nitrogen will be absorbed than in earlier cases. When the lung is more fully compressed, it takes very little nitrogen to keep it so. The tendency to re-expand is diminished. The symptoms of the patient, the condition of the lungs, and the X-ray decide the question.

Forlanini says, "It is a fundamental principle of the treatment and a condition *sine qua non* of success that volume and pressure of the pneumothorax be gradually increased to the obliteration or almost complete obliteration of the respiratory sounds."

Where there is good compression of the lung, there is shown bulging of the ribs and intercostal spaces, resonance on percussion often extending to the opposite side and obliteration or partial obliteration of the lung sounds. The abnormal sounds or rales disappear, except when heard over the lung itself. On account of adhesions, it is hard and sometimes impossible to eradicate all respiratory sounds. When the rales disappear, the breath sounds often become metallic or there is a metallic clinking, as the sound of a drop falling into an empty space. (Lapham) Cavities shrink and coalesce with loss of customary signs. There is accompanying improvement on the opposite side.

Much benefit to the patient is derived even without complete compression. At first the temperature may be higher with an increase of cough and sputum which is more easily raised and slight pain. Later these conditions are reversed and there is general improvement. Pulse rate improves, night sweats cease or decrease. Appetite and weight increase (Robinson and Floyd). The amount of sputum is diminished and the Gaffsky scale or the total number of bacilli in a given microscopic field is diminished.

Even in very advanced cases with no hope of ultimate compression, there is seen much improvement. In suitable cases, where good compression is obtained for about a year, the lung may be allowed to re-expand and assume its former function.

The main danger of the treatment is the possibility of gas embolism which has occurred mostly after the first treatment. As long as the respiratory oscillations are evident in the manometer and the pressure is negative, there is little danger. It is very dangerous to introduce any nitrogen until these conditions prevail. It is possible on account of an uncontrolled cough or sneeze for the patient to move and cause the needle to enter the lung or a vessel. Death may be instantaneous or delayed. Loss of vision, loss of consciousness and convulsions are marked features. Fortunately there are few cases reported. The key note is to know the manometer and to watch your patient.

Pleural reflex, shown by loss of vision, convulsions and attacks of paralysis which soon disappears, has been observed but only in those cases in which there was no local anaesthesia.

Pleural effusion may accompany when the lung is quite com-

pressed, but it does not amount to much and is generally absorbed.

Subcutaneous or deep emphysema may occur if the nitrogen is allowed to escape in the tissues on withdrawing the needle purposely or accidentally. Subcutaneous emphysema is of little consequence and may be controlled by pressure pad over the injection part. It will last only a short time.

Deep emphysema, shown by tightness about the chest and neck, sore throat, difficulty in swallowing, nasal voice and pains in chest generally clears up in a few days.

PRELIMINARY REPORT OF CASES.

My own experience has been limited, but I thought it might be interesting to append a preliminary report to show the types chosen and the difficulty presented by cases with pleural adhesions.

Case 1. May 1st, 1913. E. D. Female, married, age 46. Housework. Family history: father, mother, two sisters and one brother died of tuberculosis. She has one child ten years old that has tuberculosis and two children that are healthy. Past history: one year ago had pleurisy and several years ago had measles and whooping cough. Present history: cough of one year's duration and now excessive. Sputum scanty, weakness, dyspnoea, sweats and chills, ten or twelve daily. Temp. 102, P. 120, R. 24, in evening, loss of weight, occasionally slight edema of the ankles. Physical examination showed emaciation, poor color, extensive involvement of the left lung with cavity between the second and fourth ribs in front. Above the second rib in front and mid-scapula behind are dullness, bronchial breathing, increased vocal and tactile fremitus. Moist and crepitant rales throughout lung front and back. Right lung moderately involved at apex. Heart shows mitral regurgitant murmur with little enlargement. Tubercle bacilli in the sputum. Temp. 101, pulse 120, respiration 24. History otherwise negative.

At the request of the patient, I introduced 600 cc. of nitrogen in the sixth interspace, mid-axillary line. The intrathoracic pressure was not changed, being negative at the end of the operation. Slight superficial emphysema followed. Compress with adhesive controlled it. No pain and no dyspnoea.

May 5th, patient feels better. Hasn't coughed nearly so much — raises better. T. 98. P. 96. Raised considerably following the injection. May 8th, the patient feels better, coughs less and raises easily. Had only one chill this week. Appetite improved. Feels stronger, doing some housework as an illustration. Injected 250 cc. of nitrogen.

May 14th, patient tired and nervous from the care of children. Some dyspnoea. Coughs more, raises less, 600 cc. 5th interspace mid-axillary line. May 17th, patient is feeling better and doing housework. A hard patient to control. Temp. 100, P. 100, at night. Cough better. 600 cc. given. Exam. lower part of left chest tympanic. Diminished breathing. Moist and crepitant rales at top. Dullness at apex. Rales on coughing. Compensatory hypertrophy in the lower part.

May 28th, patient not so well. Dyspnoea and slight cedema of the ankles. Eve. Temp., 99. P., 116. Coughs more at night. She raises considerably on lying on the right side. For the first time in six months she can lie on her left side. Bowels are loose.

Exam. Faint mitral murmur. Slight enlargement of the heart. Cedema of the ankles. Signs same as before except rales anteriorly in lower part of left lung and in right lower lobe behind.

Patient continued to suffer from loss of compensation and dies, June 13th, 1913.

The pneumothorax treatment given in this hopeless case for symptomatic relief aided in lessening the cough and in allowing the patient to lie on her left side, and relieving her considerably of her chills and sweats. The dyspnoea and cedema, following the lack of compensation however, prevented further relief. It offered something and would perhaps have given more if the heart had been normal.

Case 2. B. C. Female, age 22. Housework, May 1, 1913. Fam. Hist., mother died of tuberculosis. Past Hist., pleurisy 2 years ago. Pres. Hist., duration $1\frac{1}{2}$ years. Cough excessive, copious expectoration, insomnia, pain in chest, dyspnoea, chills, night sweats, loss of weight. Phys. exam., poorly nourished, dullness in front extending to 2nd rib and to 3rd and 4th ribs behind. Cavity formation in each lung in front between 3rd and 4th ribs and extensive involvement throughout the left lung. Lower part of right lung not involved. Tubercle bacilli in sputum in great numbers.

This case received artificial pneumothorax for symptomatic relief and has certainly been relieved. Her cough was exasperating and nothing helped her. Now she coughs less, raises easily, has no chill or sweats with a temperature averaging 99.6 while previously it averaged 101. Her appetite is better. She has had five injections of nitrogen averaging 300 c. c. and is still being treated. The heart has been markedly pushed to the right with no apparently ill effects and the left chest is tympanic except at the apex there is a slight dullness and a few rales. Very faint breath sounds below. There is less moisture on the right side.

Case 3. T. M. Male, 23. Longshoreman. May 1st, 1913. Fam. Hist., negative. P. H., tuberculosis followed attack of pleurisy three years ago. Patient has attended the dispensary tuberculosis clinic for the past year. P. H., cough, expectoration, dyspnoea, loss of weight, night sweats, otherwise negative. Physical exam., poorly nourished, heart negative. Dyspnoea on exertion. Dullness at both tops extending to the third rib in front and the fourth rib posteriorly. Extensive involvement in left lung with small cavity between the third and fourth ribs in front. Moist and dry rales throughout front and back. Few dry rales at right top. Tubercle bacilli in sputum. In the fourth interspace anterior axillary line, 6th mid-axillary and 7th and 8th interspace, scapular line, attempts were made but the pleura proved adherent.

Case 4. May 5th, 1913. J. T. Female, married, age 32, housewife. Family Hist., neg. Past Hist., bronchitis, pleurisy, whooping cough, measles, "scrofula." Pres., ill. Two years' duration, cough, expectoration, loss of weight, hemoptysis, loss of strength, dyspnoea on exertion. Physical exam. Poor color. Dullness in both upper lobes, extensive involvement in left with cavity formation in front, moist and dry rales. Few rales at right apex. Heart negative. Sputum, positive.

On first attempt the lung was entered by the needle which was immediately followed by slight hemoptysis which cleared up in two days. Two late attempts showed evidence of adherent pleura.

Case 5. May 20, 1913. P. C., age 31, married, father of four young children. Confectioner, left work one week ago. Fam. Hist., negative. Past Hist., pleurisy last Jan., caught cold in April. Hasn't been well since. Pres., illness, soreness in lungs, cough, sweating during sleep, raises some in the morning. Occasional pains in left axilla. Loss of weight, 10 pounds in four mos. Hemoptysis, slight chills, dyspnoea, malaise, feverish towards evening. Heart, negative. Urine, negative. Sputum, positive. T., 102. P., 120. R., 24.

Physical Exam., pale color, poorly nourished, dullness in right chest to second rib in front and 5th rib posteriorly, bronchial breathing, voice and tactile fremitus. Moist and dry rales throughout right chest. Left apex dullness, broncho vesicular breathing, and dry rales. May 24, 400 cc. introduced into right interspace nipple line. Slight pain for half hour following. May 28, 700 cc. given, cough seems less, raises more easily. Eve., temp., 100. P., 116. Slight soreness at point of injection.

6-3-13. Found patient out attending circus parade. Says he is feeling better, coughs less, raises the same amount. 1,000 cc. injected in 5th interspace mid-axillary line.

6-13-13. Last evening, temp., 99.6. P., 120. R., 20. No night sweat. 300 cc. injected. Intrathoracic pressure negative at end of introduction. Exam. right apex slight dullness. Bronchial breathing voice and tactile fremitus. Few fine crackles on coughing, tympanitic below second rib in front, and third rib posteriorly. Distant breathing heard below. No abnormal sounds. Left apex, dullness, broncho-vesicular breathing. Few rales on coughing. Increased resonance below.

6-18-13. Injected 500 cc. nitrogen. Evening temp., 99.2, P., 120. R., 24.

6-21-13. Temp., normal last evening, and this morning is 98.8. P., 90. R., 24. 1,000 cc. injected.

X-ray picture taken by Dr. Lamb showed incomplete pneumothorax of right side with adhesions. Patient is still under treatment. Tuberculosis areas outlined as above.

Case 6, from the service of Drs. McDonough and Gehring at the Maine General Hospital explains itself. M. E., widow, age 40. Residence, Portland, Maine. Admitted to M. G. H., October 17, 1912. Complaint—cough, pain in right chest, sweats, chills. F. H., F. dead. Cause? M. died of tisis. Two sisters and two brothers living and well. Past Hist., usual children's diseases, measles, mump, whooping cough, chicken pox. No other illness till 1910. Then pneumonia right lower lobe, followed by empyema. Operation, drainage. Present Hist., dates from time of operation. Phys. Exam., patient well developed and nourished.

October 17, 1912. Pulse 100; Resp., 38; T., 99.4; Hgb., 90-100%. Pupils, glands, reflexes, gums, throat, negative. Heart, negative. Lungs, dullness over middle and lower lobes posteriorly on right; many coarse, moist rales; friction rub in mid-axillary line. Liver, spleen, kidneys, arteries, negative.

October 29, 1912. Aspirated in 5th right interspace in mid-axillary line. Dry tap. Various expectorants employed.

Feb. 1, 1913. Sputum contained almost pure culture of pneumococcus. Vaccine used till February 10, 1913. Organisms disappear from sputum but cough persisted. Sputum examined repeatedly for T. B. Also G. pig inoculation, always negative.

May 28, 1913. Needle put into 6th right interspace back of mid-axillary line. Dry tap.

April 3 to April 23. Employed at intervals of three days from 1 cc. to 4 cc., mixed infection phylacogen (P. D. & Co.) Each dose followed by elevation of temperature, headache, restlessness, increased expectoration. Expectoration became much thinner, and con-

tained fewer bacteria. Morning temperature now normal with rise of one degree at night. Pain in chest partly relieved by tight swathing.

May 7, 1913. Dr. Welch made four attempts to create an artificial pneumothorax. Extensive adhesions made this impossible.

June 28, 1913. X-ray still shows a cavity as large as the average egg in the right lower lobe. Patient coughs incessantly day and night. Temperature normal throughout day. Opiates alone give rest.

CONCLUSIONS.

From what I observed, heard and read, artificial pneumothorax is a very valuable adjunct to phthisiotherapy.

If care is taken, the danger to the patient is very little although there is always the possibility of accident. It should preferably be used in a sanatorium in conjunction with the open-air hygienic treatment where the most possible benefit must accrue. If that is not possible, it should be used at home in selected cases.

The patient should have the benefit of the ordinary open air treatment if there is no danger in waiting.

Advanced unilateral cases offer the most promise but the percentage of these cases is small—about 8% (Sloane).

Advanced bilateral cases, providing no complications are present, offer good results if the less diseased lung is not too much involved.

If there is considerable involvement in both lungs and the patient is suffering from severe cough, expectoration and toxemia, it should certainly be attempted. However, if the patient is comfortable and not suffering from the symptoms and is certainly hopeless, I personally see no advantage in using pneumothorax.

In approximately 25% of the cases, it will be impossible to induce pneumothorax on account of pleural adhesions. (Hamman)

In only one-third of advanced cases will it be possible to obtain complete compression. In about an equal percentage, an incomplete collapse alone will occur. (Sloane.)

Some cases with laryngeal involvement have been cured. Intestinal tuberculosis is often aggravated (Lapham). Some cases of bronchiectasis receive good results.

In severe hemorrhage or in cases not responding well to ordinary treatment or those with chronic sanguineous expectoration of considerable amount, it offers the most reasonable and effective form of treatment.

Over four hundred cases have been reported; all of these were advanced and hopeless and the recoveries were over 40 per cent (Lapham).

It is well to remember that artificial pneumothorax is a valuable

aid in selected cases but must not be delayed too long if a successful result is to be obtained.

I wish to thank Drs. Balboni and Hawes of Boston, Knopf of New York, McCarrison and Burns of North Reading for the courtesies extended. The bibliography found below has been liberally quoted.

As a matter of interest, I wish to add a personal word with their permission from some of the physicians that are investigating this subject.

Dr. John B. Hawes, 2nd, of Boston, says: "We are using pneumothorax at our State institution. Personally, I am very conservative about it. I do not believe it should be used outside a sanatorium or other institution where the patient is under absolute supervision. In certain selected cases it undoubtedly does a great deal of good. I do not believe, however, that it will ever supplant our old methods of treatment or revolutionize the tuberculosis campaign."

Dr. S. Adolphus Knopf of New York City, says: "Thus far, I can only say that the remedy has proven invaluable to me in cases of seemingly uncontrollable pulmonary hemorrhage. In these, as well as in a number of other cases, symptomatic improvement followed in the first or secondary fillings. The absence of bacilli in the sputum, unless the sputum examinations are very often repeated and during at least one year, I would not consider of great prognostic value, unless the physical signs also indicated an arrest or cure. In ten or twelve cases which I had occasion to watch and observe more closely, no pleural effusion resulted. I have thus far failed in one case to enter the intrapleuritic space on account of adhesions."

Dr. Edward R. Baldwin of Saranac Lake says: "Thus far, I have had perhaps fifty patients in whom the operation was either successful or partially so, and perhaps fifteen out of this number have received remarkable benefit. Several lost their bacilli entirely after having had treatment for some months. Others have not been so fortunate, but have remained in a condition of arrest and with excellent general health. About one-half of the successful ones have had some pleural effusions, three of whom have been purulent with pure tubercle bacilli contents; that is, not having bacteria present. In these cases, I am injecting iodoform emulsion with apparent success, although the improvements have been slow. The others have either receded entirely on the first aspiration or have disappeared spontaneously without aspiration. We have not found that it was a serious complication, excepting in the three, all of which were very bad cases."

Dr. Herbert Maxon King of Loomis, New York, says: "As regards artificial pneumothorax, we at Loomis take a very conservative view as to its therapeutic value. I think that all agree that where it can be successfully produced in advanced and progressive cases it is of decided benefit, sometimes resulting in a complete arrest of the disease, but even so we regard it as a symptomatic remedy and not a cure for the disease.

"Our first series of sixteen cases should appear in the next number of the American Journal of Medical Sciences. We have to date attempted an artificial pneumothorax in twenty-seven cases, including the sixteen of the first series above referred to. Briefly stated, the results in these twenty-seven cases have been as follows: Very successful, with arrest of disease, loss of bacilli, etc., 2; symptomatically helpful, without apparent permanent benefit, 7; unimproved or failed, 15; at present under treatment, 3; total, 27."

Jan. 30, 1913.

My Dear Dr. Welch:

Your letter has just been received as I have been away. I think you know pretty well what I think of the treatment and where I believe it to do good. I do not consider pleural effusions a favorable complication as oftentimes they tend to aggravate the symptoms and infection at subsequent introductions is likely unless extra precautions are taken. The unilateral cases will remain the best to treat, granting a free pleural cavity. Compression to be maintained an indefinite period, depending on the condition of the patient. The re-expanded lung is unharmed by the compression when maintained for one to two years. No case has been compressed longer in my series.

As long as there is sputum of a muco-purulent character, bacilli will be found. Pleural effusions are common in the advanced cases and may come on as early as the third week of treatment and as late as the thirteenth month.

I am very glad you are having success.

Sincerely,

G. M. BALBONI.

"We have had untoward symptoms immediately following nitrogen injections in three cases, but without immediately fatal termination in any. More or less pleural effusion has possibly occurred in twenty-five per cent. Of our cases, I cannot give you the exact figures at present. From these statements, you will see that we are justified in taking a very enthusiastic attitude with regard to the therapeutic value of artificial pneumothorax."

BIBLIOGRAPHY.

Balboni, Gerardo M. The Treatment of Pulmonary Tuberculosis by Artificial Pneumothorax according to the method of Forlanini.

Boston Medical and Surgical Journal, Nov. 28 to Dec. 26, 1912, inclusive.

Robinson and Flod. Artificial Pneumothorax as a Treatment of Pulmonary Tuberculosis. Archives of Internal Medicine, April, 1912, Vol. 9.

Knopf, S. Adolphus. Indications and Contra-indications of Artificial Pneumothorax. New York Medical Journal, Mar. 22, 1913.

Lapham, Mary E. Artificial Pneumothorax, Technique and Results. New York Medical Journal, March 22, 1913.

King, Herbert Maxon. Tuberculosis. Therapeusis of Internal Diseases — Forchheimer.

Robinson, Samuel. The Surgery of Infectious Diseases of the Lung and Pleura — Practical Treatment. Musser Kelly.

James, Walter B. Artificial Pneumothorax. Osler's Modern Medicine, Vol. III.

Brewer, George E. Surgery of the Thorax. Keene's Surgery, Vol. III.

Colebrook, Leonard. Notes on Four Cases of Phthisis, in which Artificial Pneumothorax was induced. Lancet, July 15, 1911.

Dumarest, E. Surgical Pneumothorax as a Treatment for Phthisis. Clinics, Vol. II, 153, 1909.

Harris, S. J. Artificial Pneumothorax. Atlanta Journal Record. January.

Holnboe, (Director of a Sanatorium, Norway). Note on a Case of Artificial Pneumothorax. Lancet. Vol. 179, No. 4537, August, 1910.

Lapham, Mary E. The Treatment of Pulmonary Tuberculosis by Artificial Pneumothorax. Southern Med. Journal, Nashville, Oct., 1911.

Lillingston, Claud. Treatment of Phthisis and Hemoptysis by Artificial Pneumothorax. Lancet, July 15, 1911.

Murphy. Surgery of the Lung. Journal Am. Med. Asso. July - August, 1898.

Outlook - London, Criticism. Pages 517 - 518. Nov. 26, 1898.

Pearson, S. Vere. Choice of Patient for Artificial Pneumothorax in Chronic Pulmonary Tuberculosis. Practitioner, Vol. lxxxvii, 1911.

Pearson, Snowden, Lillingston. A case of Artificial Pneumothorax. Lancet, July, 1911.

Rhodes, Herbert. Treatment of Pulmonary Tuberculosis by Inducing an Artificial Pneumothorax. Brit. Med. Journal, No. 2652, Oct. 28, 1911.

Schnell. A New Use of Murphy's Method of Immobilizing the Lung. New York Med. Journal, 1896.

Smirnow, M. R. Hemostasis in Pulmonary Tuberculosis by Intrapleural Injections. *Journal Am. Medical Asso.*, 1907, xlix, 2149.

Lemke. Pul. Tuberculosis Treated with Nitrogen Injections. *Jour. Am. Med. Asso.*, 1898.

Mary E. Lapham. The Treatment of Pul. Tuberculosis by Compression of the Lungs. *Amer. Journal of the Med. Sciences.* April 1, 1912.

Louis Hamman and Martin Sloane. Induced Pneumothorax in the Treatment of Pul. Tuberculosis, *Transactions of the Nat. Asso. for the Study and Prevention of the T. B.* P. 359, 1912.

Dumarest, F. Surgical Pneumothorax as a treatment for Pul. T. B. *International Clinic*, 1909, Series 19, 153.

Fredrich, P. L. The Operative Treatment of Unilateral Tbs. by Total Immobilizing of the Chest Wall by means of Thoracoplastic Pleuropneumolysis. *Surg. Gyn. & Obst.*, 1908, vii, 632.

Holmboe, W. Artificial Pneumothorax in the Treatment of Pul. T. B. *Lancet*, London, Aug. 13, 1910.

Lapham, Mary E. The Treatment of Pulmonary Tuberculosis by Compression of the Lung. *Monthly Cyclopedic and Medical Bulletin*.

Dr. Mary E. Lapham of Highlands, N. C., 49 patients. Tubercle bacilli disappeared in 18 cases. Deaths 14, 28.57%; failures 7, 14.6%; improved 16, 30.6%; success 9, 18.81%; too soon 3, 8%; total 49, 100.58%.

Causes of death—hemorrhage, aspiration pneumonia, 1; heart failure, 2; spontaneous pneumothorax, 2; empyema, 3; other lung, 1; intestinal, 5; total, 14.

The empyemas existed before the attempt was made. Causes of failure. Mobility and compressed lung. Three cases of failure to produce pleural cavity. Five cases of pleural effusion. One case became infected and developed empyema followed by spontaneous pneumothorax.

Of the 16 cases—8 did not stay long enough; 5 are making probable recoveries; 3 are uncertain; 1 on account of pleural effusion; 2 because of other lung.

Dr. Lapham adds—"The results are very encouraging when it is remembered that these were all very advanced cases, and most of them difficult to treat. One or two of them are little short of remarkable."

Martin F. Sloane of Eudowood Sanatorium, Towson, Maryland: "After two years' experience with the 'Artificial Pneumothorax Treatment' of Pulmonary Tuberculosis, in which time we have had thirty cases under our care, we feel that though the method will never

be used routinely, it is undoubtedly of benefit in carefully selected cases. On a visit to Eudowood Sanitorium in the Spring of 1911, Dr. Von Muralt of Devos, one of the perfectors of the 'New treatment' answered in reply to a question, 'That we would find about two among our hundred patients (all stages) to whom the method would be applicable.' The reply seemed ultra-conservative, but we have since come to the conclusion he was not far wrong. We can clearly see now that the extent of the lesions of those first selected for treatment precluded any possible chance of permanent results. Symptomatic results in many instances were very striking. Cough and fever subsided; sputum decreased; night sweats became less frequent and frank hæmoptysis were permanently checked. It is the most satisfactory treatment of hemorrhage, to both patient and physician, that we have ever seen used, and as the procedure is devoid of danger in careful hands, we recommend its use to those who have had difficulty in handling a distressing situation, as soon as the location of the bleeding point can be definitely determined.

It is a mistake to expect the impossible in far advanced cases, but, on the other hand, incipient cases should not be selected as candidates for the treatment until after they have been given the advantage of sanatorium routine, and tuberculin therapy and have failed to improve. Moderately advanced cases, with quiescent lesions in one lung and an uncontrollable recrudescence in the other, offer the best chances of 'apparent arrest,' or of permanent 'arrest,' and, incidentally, afford a fair and just test of the value of the procedure.

In our experience we have learned to compress the lung slowly, giving the heart and other lung time to readjust themselves, and inject from 500 cc. to 800 cc. of gas at intervals of three to four days, for two to three weeks, before attempting to completely collapse. The collapse, once obtained, should be maintained at least eighteen months before discontinuing inflations, as little permanent healing can be expected in a shorter time. We have found it necessary to continue treatment even a longer time in two cases. A short synopsis of our work is as follows:

Thirty cases treated. No collapse, on account of extensive pleural adhesions, in five. Nine have died. Of those in whom a more or less complete collapse was obtained, six are living eighteen months after beginning treatment. Four, one year after, and seven, four months after. Of the unsuccessful ones, one is living eighteen months after; one, one year after, and one four months after. Four developed a complete hydrothorax and two developed a slight amount of fluid. In no instance was the fluid removed. Twelve of the patients treated

were hemorrhage cases. We consider that nine of the whole number treated are doing very well today. One far advanced and two moderately advanced cases are practically well today, after one year to eighteen months' treatment, and are able to do from five to eight hours' work daily. Tubercle bacilli have disappeared from the sputum of five. So-called, 'pleural shock' was experienced in two instances. Both patients had lost a considerable amount of blood and were practically exsanguinated. They collapsed soon after the needle was introduced and before any gas had been injected. We have experienced no other untoward mishaps.

The brilliancy of the results in several instances has been dimmed by failure in others, but we are glad we have added this treatment to our therapeutic armamentarium, and recommend it to those who have not already done so."

**ABSTRACT FROM THE PROCEEDINGS OF THE MENTAL
HYGIENE CONFERENCE AND EXHIBIT AT THE
COLLEGE OF THE CITY OF NEW YORK,
NOV. 8-15, 1912.**

BY DR. H. M. SWIFT, PORTLAND.

This volume contains papers by various authorities in which are treated matters of importance not only to physicians but to all persons interested in practical sociology.

The mental hygiene movement has for its object the study of mental diseases with a view both to their prevention and to the most suitable treatment of individuals thus afflicted.

It is held that much insanity may be prevented, either by an attack upon its various causes, or in many instances by early and appropriate regulation of the life and thought of persons in whom certain peculiarities of manner or conduct give warning that a predisposition to mental disease exists.

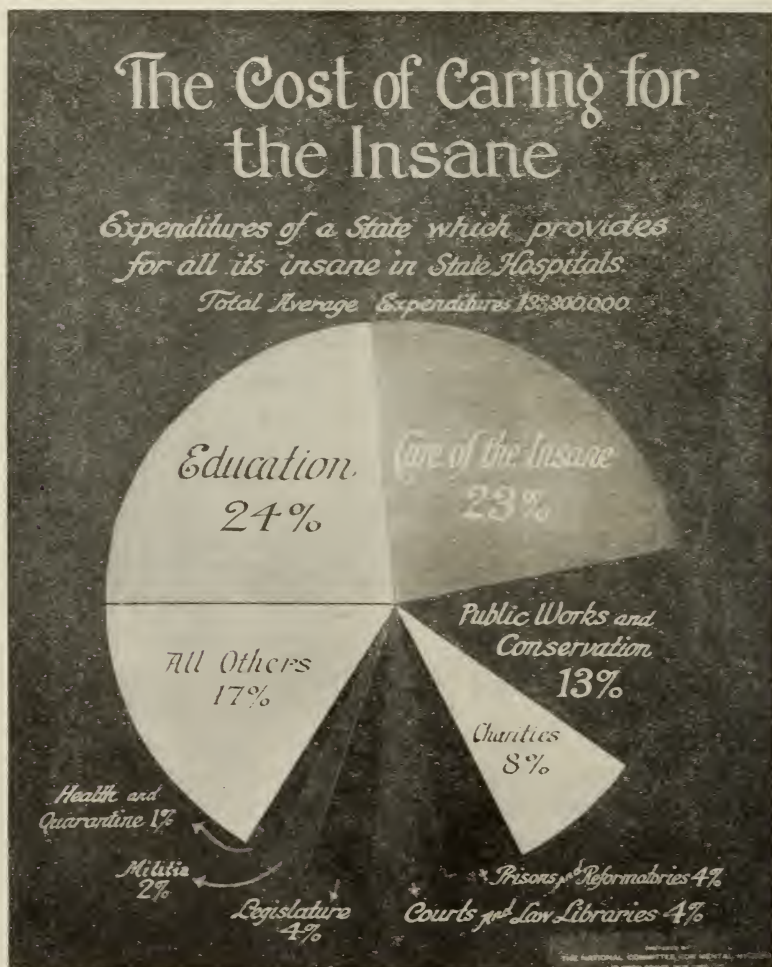
"Unsoundness of Mind a National Handicap," is the title of a paper by the president, Dr. Lewellys F. Barker. According to an estimate by Dana in 1904, the actual yearly cost of caring for the insane and feeble minded in the United States amounted to \$60,000,000 and with the increase in population, the number of the insane naturally also increases. Thus from a practical economic standpoint alone the importance of the effort to find ways to diminish the prevalence of insanity and so lessen the public burden can hardly be exaggerated.

The accompanying chart shows graphically the relation between the annual expenditure for the insane and other expenditures in New York State. It will be seen that nearly a quarter of the total

expenditure is used for the care of the insane, nearly as much as for education.

It is also to be remembered that unsoundness of mind applies not only to the actual insanity and simple mindedness but that the problem of criminality, inebriety, vagrancy, prostitution, and pauperism is also to a large extent the problem of dealing with mental defect.

The chief causes of insanity mentioned are defective heredity, alcohol, syphilis, immigration, and in a certain number of cases, bad environment, frequently several of these causes operating together in a given case. The problem of the diminution of the amount of insanity thus becomes one of how best to combat these unfavorable influences.



"Heredity in Relation to Insanity and Eugenics," is discussed by Rosanoff.

From observations on a series of 72 families, Rosanoff concludes that insanity is transmitted in a Mendelian manner, as a recessive trait, so that an individual with insane ancestry, although he himself is normal, may yet beget some insane progeny, if he should mate with another individual also of tainted heredity. This, however, does not imply that a person thus tainted should not marry but that he should be careful to choose a consort who comes of perfectly sound stock.

Other conclusions are that if both parents are insane, all the children are also liable to be afflicted, although from Rosanoff's findings, there would seem to be exceptions to this rule. On the other hand, two individuals both of sound stock will beget only healthy offspring.

These principles in regard to heredity have a practical bearing on eugenics and mental hygiene. The theory is not necessarily fatalistic because environment also may have its influence and "even where the burden of heredity is great, the realization of that fact will serve only to aid in a more intelligent adjustment of the environment with a view to the preservation as far as possible of the mental health of the individual in question."

It is hoped that these principles of heredity and eugenics may be applied toward the general betterment of the human race, both by the preservation of desirable traits and by the prevention of the propagation of those which are harmful and antisocial.

Papers on alcohol are given by the executive secretary, E. S. Elwood and by Dr. Irwin H. Neff, superintendent of the Massachusetts State Hospital for dipsomaniacs. About sixteen per cent of first admissions to the New York State insane hospitals are considered to be attributable to alcohol and if we include those cases in which alcohol is a factor in conjunction with other causes, this percentage will rise much higher.

It should be noted, however, that many cases of alcoholic insanity occur in persons of a peculiar nervous make-up, which in turn is frequently due to defective heredity, so that the problem of prevention would be in part one of eugenics as well as a direct fight against alcohol.

The defective nervous constitution of the alcoholic is emphasized also by Dr. Neff, who brings out that the tendency to continued alcoholic excesses is only a symptom of a certain type of constitutional weakness, and that the treatment of the inebriate should be not by punishment as up to recently has been generally customary, but by an

attempt to remedy the underlying mental basis. The drunkard is thus to be regarded not as one who continues his excesses out of pure wilfulness, but as a mentally sick person for whom not a jail sentence but medical treatment is indicated. The drunkard must be studied as an individual so that remedial measures appropriate to each particular personality may be applied, and the place of detention should be not the jail, but a special hospital.

The treatment of inebriety is summed up by this writer in three words — "differentiation, segregation, individualization."

The subject of "Syphilis and Insanity" is treated by Dr. George Kirby.

Thanks to the Wassermann reaction, we are now in a position to say definitely that many mental and nervous diseases, formerly of more or less doubtful origin, are really due to syphilis. The most common of such indications is general paralysis which furnishes about 14% of first admissions to the New York State Hospitals, this disease being the cause of more deaths than dysentery, malaria, small-pox, tetanus, and rabies all combined.

The Wassermann reaction teaches, furthermore, that certain forms of organic nervous disease in mentally defective children are frequently the result of hereditary syphilis. The problem of prevention of these causes has of course to do with the attempt to diminish the frequency of venereal disease in the community at large, and Kirby makes a plea that "every parent and teacher, every spiritual and moral adviser, should not fail to see that every youth is warned and properly instructed before the temptations of the world are faced."

(A further step would be the registration of cases of venereal diseases, as of any contagious disease, and no person who has had syphilis should be allowed to marry until the blood tests are negative.)

The subject of "Immigration and Insanity" is treated by Hon. William Williams, U. S. Commissioner of Immigration.

It should be emphasized that by immigration which brings annually 900,000 new arrivals to our shores, the numbers of our insane and mentally defective are greatly increased and that although many of these defectives are detected and sooner or later deported, yet the deportation laws are still inadequate.

"Early manifestations of Mental Diseases," is the subject of a paper by Dr. August Hoch.

Associated with the various fundamental causes of insanity are others such as unfavorable environment and the inability of certain individuals to adjust themselves properly to the exigencies of life. It is notably in dementia praecox that we may often find, from a careful history, evidence of long standing, improper self-management, and inadequate adjustment of the individual to his environment, the continuation of which tendencies developed into an actual psychosis.

While in such cases it is doubtless true that inherent tendency to mental disease exists, Hoch nevertheless believes that by a very careful study of the peculiar mental constitutions and by an early recognition of certain danger signals, which give warning that insanity is imminent, faulty mental attitudes may be corrected and the individual thus threatened brought into better harmony with his environment, so that the actual mental breakdown is averted.

The report contains many valuable contributions which will repay the reading. Especially important are the papers of Myer and Southard on the functions of the psychopathic hospital. Space, however, does not permit of further mention.

FOOTBALL AND PHYSICAL EFFICIENCY.

BY E. W. GEHRING, M. D., PORTLAND.

The most careless reader of recent issues of the daily press cannot fail to have noted how large is the number of injured and killed among those participating in football. It is astounding with what nonchalance we read these reports and, at once, dismiss them from the mind without raising our voices in spirited protest against a game which, as a means of physical development for our youth, not only has nothing peculiar to commend it, but is dangerous to life and limb and not infrequently is responsible for premature death or permanent disability. Indeed, like all other highly specialized or strenuous forms of athletics, football is to be condemned rather because of the physically inefficient which it creates than on account of the lives which it destroys outright.

The game does not confer a single benefit which cannot be derived from indulgence in other saner, safer sports. Moreover, among any body of students it is only adapted to the already physically strong, and too often is their undoing.

In support of my statements, I respectfully call the attention of parents and educators to a paper entitled, "Football and Physical Efficiency," by Col. Clarence P. Townsley, in the *Army and Navy Journal* for October 18, 1913. The writer is superintendent of the United States Military Academy. In his annual report, he gives strong support to Surgeon General Charles F. Stokes, United States Navy, who has long waged a crusade against the dangers of football, stating that, "Football certainly serves no useful purpose in the physical development of training in the corps, as it is voluntary and attracts to its squad only the few who are already physically strong, active, and well developed. Its value, if it has any, lies mainly in

the interest, entertainment, and excitement it affords to the other members of the corps and the thousands who attend its principal contests and are willing to contribute to its support."

Surgeon General Stokes' attitude toward the game may be learned from the following statement made by the New York Medical Journal in its issue of November 1, 1913.

"From the very beginning of his term as head of the Bureau of Medicine and Surgery of the navy, he has thundered against the injurious effects of football and other too strenuous sports, and in his very first annual report, took strong ground against the encouragement of games which he believes tend to weaken the heart of the participant and thus make him an easy victim in later years to the inroads of disease. Doctor Stokes has studied the careers of a number of officers who were athletes in their academy days, and has sought to prove from the data thus collected that the service suffers a positive loss in weakened physique at a time in life when the best should be expected of officers in the co-ordination of mind and body. In one of the surgeon general's reports, he gave the records of 622 star athletes in classes from 1892 to 1911, compared with the records of 580 of non-athletic midshipmen, showing that the former had suffered severely in health. An excess of fifty per cent was shown among these star athletes over the non-athletic, in valvular diseases of the heart, general poor health, obesity, tuberculosis, etc. The surgeon general of the navy believes that this condition is brought about by overtraining and overstraining, and has recommended that athletics be regulated to avoid such conditions, that endurance contests dependent upon brute strength be eliminated from the category of academy sports, and that a maximum effort be made to develop a symmetrical, normal physique rather than a highly specialized machine."

In view of such vigorous condemnation of football and other violent sports by those competent to express an opinion, in view of the sad experience of most physicians in the treatment of young men rendered unfit for life's work by the opportunity afforded them at high school or college to participate in hazardous forms of exercise; in view, further, of the cost attendant upon bringing up a boy to the high school age, only to have him then killed or maimed for life, in order that exciting entertainment may be provided for others and a spirit of senseless rivalry engendered among competing schools; in view of all this, I ask, isn't it time to abolish a practice that is fraught with danger, both immediate and remote, while serving no good purpose?

The toleration of this sport from which boys and young men too frequently emerge, not without assistance, but with fractured bones, severe internal injuries, hearts damaged for life, or unconscious, is not an evidence of civilization on the part of a people but a blot on an age whose watchword is "efficiency."

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Autopsies.

The following editorial appearing in "Colorado Medicine," September, 1913, so concisely and clearly presents the conditions surrounding the obtaining of post-mortem examinations that it is quoted in toto.

"The ridiculously small number of post-mortem examinations made in this country is a standing reproach to American medicine. An investigation conducted by a committee of the New York Academy of Medicine reveals how backward our public hospitals are in the important detail as compared with European institutions. When the Allgemeines Krankenhaus of Vienna can show 1866 autopsies in a year out of a total death rate of 1867, (99.9 per cent) the record of Bellevue Hospital of 11.6 per cent looks sickly in comparison. Some American institutions make a better showing; thus Johns Hopkins Hospital gives a percentage of 62.6 and San Francisco City Hospital, 45.1. Other institutions make a still poorer showing than Bellevue.

Five cases are given by the committees in explanation of our pitiful results: (1) Adverse public opinion and prejudice, which, it is claimed, are stronger in this country than abroad; (2) the existing law, giving the next of kin the right to refuse an autopsy; (3) undertakers and burial societies; (4) the negligence of the hospital authorities in not procuring a signed permit from the nearest relative of every patient admitted; (5) the anatomical department of medical schools in rejecting bodies for dissecting purposes that had been previously "posted," thus compelling the undertaker, who has the contract of burying the unclaimed dead, to refuse post-mortem examination.

How do the Colorado hospitals rank in the matter of autopsies? Private institutions, of course, are more or less restricted in this regard. Some of the sanatoria for tuberculosis present fairly good records. The best criterion, however, for a proper estimate, both as to capacity, the death rate and the number of possible autopsies, is the City and County Hospital of Denver. Be it said with shame that our state is far behind the poorest of the list published by the com-

mittee. Out of 514 deaths in 1912, only eighteen came to autopsy — a post-mortem rate of 3.5 per cent. This is certainly a most deplorable state of affairs. With this wealth of scientific material, only one autopsy in three weeks. *Hinc illae lachrymae.*

The causes of this inactivity in post-mortem investigation are not quite the same in this region as those assigned by the committee. We have, of course, the identical struggle against prejudice and superstition, but not to the same extent as in New York, with its larger foreign population. In our experience, the native-born are more easily persuaded to grant an autopsy than the immigrant class. Abroad the hospitals are given better facilities by state regulation rather than by enlightened public opinion. Nor should we blame the undertaker whom we have always found willing to co-operate with the physician who is seeking a post-mortem examination. In fact, the former, by the exercise of tact and diplomacy, more frequently receives the coveted permit than does the plea of the attending physician.

Whether the County Hospital in the present state of public opinion can demand from the next of kin, prior to the administration of a patient, authorization for an autopsy in the event of death, is very questionable. The recommendation of the committee to interest the public in this important matter through the press and other agencies is most excellent advice. To carry out any beneficent measure we must have the people behind us.

The old-time policy of our profession to withhold matters medical from the laity is rapidly giving way to the new tactics of publicity. Through articles in the press and by the publication of leaflets and holding public lectures it will be easy to demonstrate to the voter that the progress of scientific medicine is absolutely dependent on the facilities for post-mortem examinations. A campaign of this kind will eventually bring about legislation, making it compulsory to hold autopsies on every case that dies in a public institution.

Before we come to the public, however, with this request, we must first clean our own premises. Have we, as physicians, always exhausted every effort to verify our diagnoses at the autopsy table? How often the mark is missed is revealed in Cabot's well-known tables of percentages of correct diagnoses.

In an endeavor to find the causes for the relatively small number of autopsies at the County Hospital, the lack of interest shown by the staff was given as the excuse. With all the obstacles placed in our path by adverse legislation, it is still possible by the employment of diplomatic measures to hold post-mortems in over half of the cases. If the internes do not evince the proper interest and the hospital management does not see the autopsies are held as part of its routine, the fault lies in a great degree with the members of the visiting staff who do not always insist on it, and occasionally even neglect to attend the post-mortem when they are called. The staff must take the initiative in this matter and encourage the hospital authorities in carrying out this essential detail of its medical department.

In private practice, too, scientific medicine will be greatly advanced by the endeavor to secure autopsies.

Virchow truly has said that for medicine to be an exact science

we must learn to think anatomically. It is only through autopsies that Death rejoiceth in succouring Life.' "

That the conditions existing in Colorado are well matched in this state the records of our public hospitals bear eloquent evidence.

It seems to the writer from an experience in the methods of procedure adopted in the institution presenting the best percentage in the United States, that the obstacles to obtaining consent are much overrated, and that the chief fault lies in not maintaining an alert attitude in making a systematic attempt at requesting permission. It is too often taken for granted that consent will be refused, and we apathetically allow the material to slip from our grasp.

Drastic legislation might be necessary to rival the statistics of the Allgemeines Krankenhaus but this is hardly desirable or even needed. The simple request only will often surprise us by the readiness with which consent is granted; a more elaborate explanation of the desirability of finding the exact cause of death will still further increase the percentage of successes and when necessity warrants or occasion seems to demand, a quiet insistence will raise the percentage still higher.

Artificial Pneumothorax.

During the past two years, there has been a widespread re-awakening of interest in the procedure known as the induction of artificial pneumothorax, an operation first heralded into prominence in this country by published cases from the clinic of Dr. J. B. Murphy, whose work is said to have been antedated by that of Forlanini, an Italian. Interest was quickly aroused by the report of cases reacting favorably, and as quickly extinguished by the report of unfavorable results following rapidly, so that the induction of artificial pneumothorax was discarded, discredited, before it had actually been taken up by the majority of clinicians. In Europe, with the exception of a very few clinics, the same condition occurred. So unfavorable was the experience obtained from this trial in certain of the clinics that the directors have persistently refused to be again caught on the wave of its newly acquired popularity. In other clinics, equally as celebrated and conservative, the procedure is working its way gradually back into favor.

The principle underlying artificial pneumothorax is not new, rest being an important adjunct in the treatment of tubercular lesions in the lung as elsewhere. Rest in this instance is secured by mechanically compressing the lung with gas artificially introduced into the pleural space.

Nature produces a quite similar effect only in a different way

by means of a pleural effusion which mechanically compresses and puts the lung at rest for a certain time. Clinicians are becoming more and more cautious in the removal of a pleural exudate in these cases believed to be tubercular and are inclined to look upon it as nature's method of putting an affected and irritated lung at rest.

In some of the best clinics aspiration of a pleural exudate unless to relieve symptoms of dyspnoea or other evidences of pressure is becoming an operation of considerable rarity. A still further argument in allowing the gradual absorption of an exudate is that it continually stimulates the system in the production of agencies to counteract the initial lesion thus acting somewhat like an endogenous reservoir of tuberculin.

The length of time that a lung may be totally collapsed and not suffer a destruction of tissue or subsequent enfeeblement is truly remarkable.

The procedure has demonstrated that hemorrhage and the absorption from cavities can be as effectually checked in some instances by artificial pneumothorax as by the much more radical operation of thoracoplasty.

Unfortunately many tubercular processes in the lung are bilateral and if it is theoretically a good thing to put one lung at rest, to the thinking mind, the other lung also affected by a similar process would receive just the opposite treatment, by having double or at least an increased amount of work suddenly thrown upon it.

The Journal is fortunate to have in this issue a paper covering the subject of the present status of artificial pneumothorax as it exists, especially in this country, with the indications and contra-indications and the technique carefully presented, together with a very complete review of the literature, the author's report of personal cases and liberal quotations from various men of experience.

Clinical Congress of Surgeons.

The fourth session of the Clinical Congress of Surgeons was held in Chicago, Nov. 8-10. The attendance at this session totalled about 5,000, making it difficult for members to see much clinical work. On the other hand, it gave them an opportunity to renew old acquaintances as well as to meet new men from different parts of the country and to discuss the work which is being carried on in different sections of the States.

The most common complaint heard was in regard to the loose method of registration, which enables any individual to register, the only question asked in the majority of cases being, "Do you wish to

register?" thus leaving it open for laymen as well as members of the medical profession to take advantage of these sessions. It would seem a wise measure to provide some form of identification to be issued prior to the regular meeting. A great many men attending these sessions are men who, in a strict sense, are internes, doing a small amount of minor surgery. They find little value in attending clinics, nevertheless they are found in large numbers in every clinic room, thus barring out men who are desirous of seeing work and have traveled far to secure the advantages of the sessions.

Chicago is probably the largest medical center in this country but the division of the medical profession into the so-called "high-brows" and "low-brows" has lessened her opportunity for coming to the front. We sincerely hope that by the time the Clinical Congress again meets, much of the antagonistic spirit which dominates the older members of the medical profession of Chicago will have died a natural death and we can then rest assured that we shall have a much more interesting and valuable session of a body which should receive the entire and united support of the profession in the city which serves as its host.

American College of Surgeons.

The American College of Surgeons, which started with a membership of about 900, represents an effort in the right line and if it can be conducted without prejudice and with equal fairness to all, should prove of inestimable value. Unfortunately, in the city of its birth, such an impartial method was not adopted and has caused considerable feeling on the part of the so-called "low-brows," who are very active in their opposition and criticism. To those members who attended this session came complaints from all over the country, as illustrated from one sizable city in New York. Two junior surgeons were admitted to membership, as stated by one of them, whereas the senior surgeon was not admitted, although more eligible than either of the other two. This savors of favoritism and unless the spirit thus far carried is changed there may be a question of the ultimate result. Such an organization exists in England and there seems no reason why one should not prove advantageous to America but it must come along different lines than at present drawn. We sincerely hope for its future success.

County News and Notes.

Under county news and notes of this issue, you will find two relatively important matters. First, the action taken at the Androscoggin County meeting relative to the abuse of medical charity. This

we believe to be a step in the right direction and deserves the support of the entire profession.

Secondly, we will again call attention to the fact that Dr. L. T. Sajous of Philadelphia, is to read a paper on "The Various Forms of Goitre and their Treatment," at the next meeting of the Cumberland County Society to be held at the Congress Square Hotel, Friday, Dec. 19th, to which you are cordially invited.

Goiter.

The recent suggestion to ligate one of the superior thyroid arteries for the cure or improvement of goiter is worth recalling to medical practitioners, with a view by similar methods of obtaining definite information concerning its actual value in this disease so difficult to manage. A brief and suggestive paper on this topic can be found from the pen of Dr. Watson of Oklahoma in the New York Medical Record for September 27th, last. The single case which he describes is not much for material to go by, but it is promising in suggestiveness, and the operation is comparatively slight in its risk, alongside the more formidable ones at present performed.

Preventive Vaccination against Typhoid in the French Navy.

More than 60,000 of the marine population of France failed to be vaccinated against typhoid in 1912, with the result of nearly 550 cases of fever and over one hundred of enteritis with increased temperature. On the contrary more than 3,000 sailors in the navy were vaccinated, subjected themselves to same mode of life and exposure as the 60,000, but not one of the three thousand had a single case of typhoid. This would seem to prove that immunity is as effective in one part of the world as in another, after proper preventive typhoid vaccination.

Poisoning from Corrosive Sublimate Tablets.

The recent occurrence of several instances of mercurial poisoning from mistaking tablets of this material in place of such as are harmless, again, and constantly as it would seem, calls attention to the necessity of compelling manufacturers to make all such poisonous tablets of some unusual shape and color and additionally to place each one in a wrapper of its own. If the shape or color might possibly be mistaken in the dark, the wrapper would awaken suspicion.

The recent investigation by Linhart on the instantaneous transformation of mercuric compounds into calomel, and the application of

this process in cases of mercurial poisoning will be followed with interest by the profession and the public alike. By this method, sodium phosphate is suspended in water, treated with a saturated solution of sodium bicarbonate until effervescence ceases. The sodium bicarbonate solution is then added to excess. The reagent thus prepared may be administered by the mouth or intravenously. The calomel formed in the system by this reagent, in cases of mercurial corrosive poisoning, may be removed after several hours by magnesium citrate. Animal experiments with the reagent mentioned, show recovery from corrosive poisoning as late as 39 minutes after a fatal dose had been administered.

International Medical Congress, August, 1913. Ophthalmological Section.

It is a pity that we do not get a condensed report of the last International Medical Congress in London. As for the ophthalmological section, we may say that it was opened with a discussion on diseases, not of syphilitic nature, producing inflammations of the iris and uveal tract. Amongst those mentioned were gout, rheumatism, diabetes, influenza, fevers, renal affections, auto-intoxications, and diseases of the ear, nose, naso-pharynx and accessory cavities.

A paper on the accommodation argued that people of age should wear lenses for near work at an earlier age than is usually advised. By not doing so, the eye is impaired and its life work abbreviated.

A very interesting account was given of the progress made in Egypt in arresting, curing and preventing opthalmia which not so long ago made so many of the natives blind for life. A good deal was said about a new method of curing lachrymation and abscesses of the lachrymal sac by opening it up from below by an operation on the turbinates. Four fairly successful cases with some addition of useful sight from transplantation of the cornea were presented. There was an all day discussion on trephining in glaucoma, a subject mentioned elsewhere of late in the Journal. Other methods mentioned for the same disease were trap door operation; corneal splitting; and ex-section of the sclera. A large number of specimens were exhibited, as well as new instruments and safety goggles for dangerous trades.

Parinand's conjunctivitis has long been a topic of interest, especially considering its pathogenesis. It is now believed that our Dr. Verhoeff of Boston has successfully located the cause of this paradoxical ocular inflammation in the presence of a filamentous micro-organism.

There was also an exhibit of some beautiful color photographs of external diseases of the eye, all taken by a new process with use of the flash light.

Necrology.

ARTHUR ADELBERT DOWNS.

Dr. Downs, a young, a quiet, but a leading member of this Association died very suddenly October 13, 1913, after a brief illness from cerebral meningitis which had supervened upon a carbuncle of the face and nose.

He was born May 13, 1874, at Exeter, Maine, the son of Frederick and Aramita (Simpson) Downs, was educated at East Corinth Academy, studied one year at the Medical School of Maine and obtained his medical degree at Bellevue Hospital Medical School in 1897. He also took at various times during his active medical practice, prolonged post-graduate courses at Harvard and at Johns Hopkins, and always maintained a keen interest in all advances in medicine, until it culminated in his special devotion to the study of the prevention and cure of tuberculosis. He practiced some time at Burnham, Maine, but he was far from being one of those sluggish men, content to pick up drift wood, and never on the watch to seize the opportunity that comes along on winged feet. For he was genially ambitious from his start in practice and at the first opportunity for an opening into a large field of usefulness, he removed in 1898 from Burnham to Fairfield, where his energy and his straightforwardness of purpose soon brought him an excellent practice. Here, in 1904, he married Miss Vira Packard of Buckfield who was herself also interested in medicine from previous training in hospitals and proved a valuable helper.

In his enlarged field of practice, however, Dr. Downs was destined not to remain for long, for it happened that a camp for the treatment of tuberculosis, and an Association for the prevention and treatment also, of this mysterious pestilence, the Central Maine Association for the Relief and Prevention of Tuberculosis, were established from Fairfield as its headquarters. Into this camp and organized reformation, Dr. Downs plunged enthusiastically and whole heartedly from the very first. He abandoned his many patients, his widely spread clientage, and became a Crusader against tuberculosis. To this he devoted the rest of his life. He studied widely on the topic, obtained the latest ideas regarding prevention and cure, learned everything available concerning the establishment of proper buildings for the care of the afflicted, and traveled to and fro in Maine, a zealous champion of his faith. Those who read our "Journal," will

recall with pleasure and interest that masterly paper read by Dr. Downs before the Y. M. C. A. of Bowdoin, "On the Relation of the Church to Medical Social Service." No one could read this paper appreciatively, without perceiving sympathy with the practical suggestions therein outlined.

It is a pity that younger men should leave our ranks before those who are older and whose active work is largely done. We regret the departure from amongst us of men of youth and energy. But we must emphasize the example of this younger member, gone too early from our lists. Instead of remaining an idler in the rank and file, he put himself forward as a leader. Where so briefly he led, let us hope that he will soon be followed by others, so that the excellent cause for which he gave the last years of his life, the steady fight against tuberculosis shall not falter, even for a while. Let us also hope that when the Central Maine Sanatorium rises once more from its ruined foundations, one pavilion at least shall bear the honored name of Arthur Adelbert Downs.

J. A. S.

NOTICE.

Army Medical Corps Examinations.

The Surgeon General of the Army announces that preliminary examinations for appointment of first lieutenants in the army medical corps will be held on January 19, 1914, at points to be hereafter designated.

Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to secure an invitation are that the applicant shall be a citizen of the United States, shall be between 22 and 30 years of age, a graduate of a medical school legally authorized to confer the degree of Doctor of Medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training as an interne, after graduation. The examinations will be held simultaneously throughout the country at points where boards can be convened. Due consideration will be given to localities from which applications are received, in order to lessen the travelling expenses of applicants as much as possible.

In order to perfect all necessary arrangements for the examinations, applications must be completed and in possession of the adjutant general at least three weeks before the date of examination. Early attention is therefore enjoined upon all intending applicants. There are at present twenty-six vacancies in the medical corps of the army.

Medico - Legal.

Chapter 166.

AN ACT relating to the disbursement of appropriations to institutions receiving State aid.

No institution, which accepts in any of its departments for a stated consideration, persons for medical or surgical treatment and whose financial affairs are not wholly under the control of the State, shall receive from the State treasury any appropriations made by the legislature, or any part thereof, until the State auditor shall be satisfied that its per capita per diem charge for services in such departments is not less than the average cost of such service for the preceding year; but nothing in this act shall be construed to prevent the acceptance by any institution of a less sum than the face of the bill in payment of the same from those judged by the managers to be unable to pay the full amount, nor the performance of gratuitous service for those deemed worthy.

Chapter 96.

AN ACT creating a State Board of Charities and Corrections and Prescribing the Powers and Duties Thereof.

Section 1. The governor, by and with the advice and consent of the council shall appoint five persons, at least one of whom shall be a woman, who shall constitute a State Board of Charities and Corrections, to serve without compensation, except their traveling and other necessary expenses which shall be audited by the state auditor and paid by the state treasurer upon the certificate of the state auditor issued therefor, as provided by law. One of these persons, as selected by the governor upon the first appointment, shall serve for five years, one for four years, one for three years, one for two years and one for one year, and upon the expiration of the terms of each, his or her successor shall in like manner be appointed for the term of five years. Any vacancy arising before the expiration of a term of office shall be filled by appointment by the governor for the residue of the term. The board shall be non-partisan politically. Regular meetings of the board shall be held quarterly, or oftener, if required, and a suitable room shall be provided in the state house for its use. The board may elect a president, appoint a secretary and agents, all subject to approval and removal by the governor, and make such rules and orders for the regulation of its proceedings as it may deem necessary. All rules and regulations governing the administration of state institutions must be approved by the state board, and no superintendent, agent or other under-official shall have any discretionary power to change such rules and regulations.

Section 2. The board shall appoint a secretary, who shall not

be chosen from their own number, and who shall be qualified by special knowledge and experience in charitable, correctional and institutional work, and who shall receive for his services, in addition to his traveling and other necessary expenses, such salary as may be agreed upon by the board, with the advice and consent of the governor and council. The accounts of such secretary for his traveling and other necessary expenses shall be approved by the board, audited by the state auditor and, together with the salary of such secretary, not exceeding twenty-five hundred dollars shall be paid out of the state treasury upon the certificate of the state auditor issued thereof. The expenses of the board and the salary and expense of the secretary or of any agent employed by the board not exceeding in all the sum of six thousand dollars shall be paid pro rata by all institutions coming within the scope of this act which receive state aid in the following manner, viz.: Each of such institutions shall pay such proportion of said total expenses for any one year as its own appropriation for that year bears to the total amount appropriated for that year for the benefit of all such institutions.

Section 3. The board shall investigate and inspect the whole system of public charities and correctional institutions in the state and the work of any department of the same, examine into the condition and management of all prisons, jails, reform schools, industrial schools of a charitable or correctional nature, children's homes, hospitals, sanatoriums, almshouses, orphanages, hospitals for the insane, schools or homes for feeble-minded and any and all other institutions of such nature which derive their support wholly or in part from state, county or municipal appropriations, but not including any institution of a purely educational or industrial nature; and any private institution of a charitable or correctional nature may upon application and request in writing made to the secretary of the board, be included in the list of institutions under the inspection of said board and become subject to the provisions of this act. The officers in charge of all institutions of a charitable or correctional nature under the inspection of the board and local boards or committees having any powers or duties relative to the management of the same, and those who are in any way responsible for the administration of public funds used for the relief or maintenance of the poor, shall furnish to the board or its secretary such information and statistics as may be demanded. The board may prescribe such forms not inconsistent with those otherwise prescribed by law as it may deem necessary to secure uniformity and accuracy in the statements of the several institutions and officials reporting. The board in its discretion with knowledge and consent of the governor of the state may at any time make an investigation of the management of any charitable, reformatory, penal or other institution made subject to its supervision by the terms of this act; and when authorized by the governor and council the board shall in making such investigation have power to summon witnesses and demand the production of papers and documents material as evidence, and to compel the attendance of such witnesses and the production of such papers and documents by punishing for contempt in case of wilful failure, neglect or refusal to attend on the part of

any person summoned as a witness, or to produce such papers or documents when ordered by the board, and shall have power to administer oaths and affirmations; and the report of such investigations, with the testimony and conclusions of the board thereon, shall be made to the governor and council and may be submitted by them with their recommendations, to the legislature.

Section 4. Each institution under the inspection of the board shall be visited at least once each year by a member of the board or by the secretary of the board or authorized agent employed by the board for that purpose, and as much oftener as may be found expedient and at such times said visiting member or secretary shall consult with the officers of such institutions and make such recommendations and suggestions as to the management thereof as may seem advisable, and the board as a whole shall, whenever it seems to be necessary, formally recommend to the trustees or boards of management of any such institution or of any department of public charities or corrections such course of action in the conduct of said institution or department as the board shall deem best. The board shall also give to the governor, or governor and council, or to the legislature or any committee thereof, at any time upon their request, or when the board shall deem it necessary, information and advice with reference to any charitable or correctional institutions which the board is required by this act to inspect or investigate, or as to which it is required to collect information or statistics, provided, however, that before any report shall be made by the board to the governor and council or to the legislature recommending any change in the policy or management of any institution reasonable notice thereof shall be given to the trustees or boards of management of the same.

Section 5. Any minor child who shall come in any way under the inspection or supervision of the state board, when placed in a family, shall be placed in a family of the same religious faith as that of the parents or surviving parent of such child, where a suitable family of such faith can be found willing to take such child. Any written promise made to either parent in such manner shall be faithfully carried out by the board.

If such family cannot be found, then such child shall be placed in an institution maintained for children of such faith. In case no institution of such faith exists in this state or is able to take said child, then it may be placed in such institution as may be approved by the board until such a family has been secured: provided, however, that if the parents of such child are of different religious faiths, or the faith of its parents cannot for any reason be ascertained, then such child shall be placed in a family or institution of that religious faith in which such child has been reared and educated, but where no such family or institution can be found to take such child, then in some institution approved by said board until such family or institution can be found.

No child when placed in any home or institution shall be denied the opportunity of attending the religious worship or exercising the religious belief of its parents or surviving parent or in which it was reared and educated.

Section 6. The board shall give its opinion as to advisability of the proposed organization and incorporation of all institutions of a charitable eleemosynary, correctional or reformatory character which are or shall be subject to the supervision and inspection of the board.

Section 7. All plans and specifications for new jails, workhouses, prisons, reformatories, children's homes, almshouses, hospitals, or other similar institutions and buildings for charitable or correctional purposes which are to be in any way under the inspection of the state board shall be submitted to the board for criticism and suggestions before the same are accepted.

Section 8. Overseers of the poor and all other officers having charge of the administration of pauper funds shall keep full and accurate records of the paupers fully supported, the persons relieved and partially supported, and the travelers and vagrants lodged at the expense of their respective towns, together with the amount paid by them for such support and relief and shall annually make return of the number of such persons supported and relieved, with the cost, to the State Board of Charities. From the returns made by the overseers of the poor or other officers responsible for the administration of pauper funds the board shall prepare and print in its annual report a complete statement and table of all statistics and information thus obtained.

Section 9. The board shall annually on the thirty-first day of December prepare and print, for the use of the legislature, a full and complete report of its work during the year ending on the first day of November preceding, stating in detail all the expenses incurred, all officers and agents employed, with a report of the secretary, showing the actual condition of the various institutions under its supervision, with such suggestions and recommendations as it may deem necessary and advisable.

Section 10. No member of said board or its secretary or any agent thereof shall be directly or indirectly interested in any contract for the purchase of land or for building, altering or repairing any institution or building which by this act they are authorized to visit and inspect or for furnishing materials or supplies for the same, nor shall any officers of such institution be eligible to appointment on the board hereby created.

Section 11. Any official or person who shall wilfully fail, neglect or refuse to perform any of the duties imposed upon him by the provisions of this act, shall be fined not more than five hundred dollars, or be imprisoned not more than six months.

Section 12. It shall be the duty of the attorney general and of the several county attorneys within their respective counties when so required, to furnish such legal assistance, counsel or advice as the board may require in the discharge of its duties.

Section 13. The secretary of said board shall have been a resident of the state of Maine for at least five years.

[Approved April 9.]

Book Reviews.

International Clinics, Vol. 3, 23d Series.

Published by J. B. Lippincott Co. Price \$2.00.

This volume of International Clinics is especially full of valuable information and amply repays one for the time spent in reading it.

Among its contributors we find such well-known men as William Seaman Bainbridge, Astley P. C. Ashhurst, Henry T. Byford, Peter Daniel, and others.

Under "Diagnosis and Treatment" are discussed such subjects as "The Prophylaxis and Treatment of Malarial Infections;" "Remarks on a Clinical Study of Uncinariasis and its Treatment;" "On the Treatment of Pneumonia;" "The Diagnosis and Treatment of Gastric and Duodenal Ulcers;" "Treatment of Diseases of the Heart;" "Treatment of Pulmonary Tuberculosis by Hydrotherapy;" "Practical Points in the Management of some Pulmonary Diseases;" "The newer Medicinal and Non-Medicinal Diuretics;" "Hypochlorhydria and its Treatment;" and "Treatment of the Common Vegetable Parasitic Diseases of the skin."

"Gastro-Intestinal Toxaemia — its Cause and Treatment" and "Alimentary Toxaemia," are ably discussed under the heading of Medicine.

Several important subjects are also discussed under surgery, medico-legal and electropeutics.

Kelly's Cyclopaedia of Deceased American Physicians.

We have already given some space to a notice of this excellent biographical work, and are offering to our readers a second notice, to call their attention once more to the only collection of lives of American medical worthies that has appeared in many years. Dr. Kelly's collection of lives of men who have worked hard to advance medicine in all its branches, deserves well of the entire profession, and it should be in the library of every progressive practitioner. For, instead of the student of medical history being compelled to hunt for a long time and often in vain, for notices of physicians, even of his own State, he will find them in the two volumes of this meritorious work. If, in looking over its contents, he finds defects, omissions, or mis-statements, the editor in chief or the writer of the life in question will gladly accept suggestions in every direction that may help to illumine the career of those whom the cyclopaedia intended to honor.

Differential Diagnosis.

By Richard C. Cabot, M. D., Assistant Professor of Clinical Medicine, Harvard Medical School. W. B. Saunders Co., Publishers.

This book is an attempt to study medicine from the point of view of the presenting symptom. In order to do this, the author uses the following plan. First, to present a list of the common causes of the symptoms most often complained of by patients. Second, to classify these causes in the order of their frequency, so far as is possible. And third, to illustrate them by case-histories in which the presenting symptom is followed home until a diagnostic problem and its solution are presented.

He has selected twelve symptoms and illustrated them by the description of 385 cases. The work is made very valuable by the use of so many excellent diagrams and charts.

Surgical After-Treatment.

By L. R. G. Crandon, M. D., and Albert Ehrenfried, M. D. Octavo of 831 pages, with 264 original illustrations. W. B. Saunders Co., Publishers. Cloth, \$6.00; morocco, \$7.50.

This book has been written chiefly to meet the needs of the house surgeon in hospitals and for the general practitioner in communities which are not surgical centers.

It is a thoroughly practical book and the many excellent illustrations greatly increase its value.

Preventive Medicine and Hygiene.

By Prof. Milton J. Rosenau. Published by D. Appleton & Co. Price, \$6.00.

This volume, written in text book style, is divided into two parts, hygiene and sanitation. It is the only book on the market bringing so many facts together in one volume.

"Preventive Medicine and Hygiene" gives us all the latest facts compiled by one who has devoted twenty-three years to this line of work at home and abroad.

The volume is indispensable to a public health officer and of great value to the practitioner.

The Care of the Insane and Hospital Management.

By Charles Whitney Page. W. M. Leonard, Publisher.

This little book is a plea for the better care of the insane by the "non-restraint" method. To illustrate the meaning of this method, the author quotes Dr. Conolly, Superintendent of the Insane Asylum at

Hanwell, Eng., who first forced the question of "non-restraint" upon public attention. He declares that to manage a hospital for the insane successfully, four conditions are essential to success. Namely, a well-constituted governing body; such a body "animated by philanthropy;" philanthropy "directed by intelligence" and last, proper officers.

These four conditions are fully amplified by the author under the following headings: "The selection, qualifications and duties of the Hospital Trustees, Superintendent, and Assistant Physicians." "The importance and advantages of the laboratory." "The 'non-restraint' method of managing the patients" and the character and duties of the attendants and nurses.

The appendix is a very valuable part of this book. In this are described actual cases which supply clues to the methods by which the rules and suggestions advanced might be applied.

The author also advises the use of a card index in insane hospitals and describes his method in a very clear, concise way.

The Narcotic Diseases and Allied Ailments.

By George E. Petty, M. D. F. A. Davis Co., Publishers. Price, \$5.00.

This book of some five hundred pages deals with narcotic addiction as a disease and so brings it into the field of internal medicine and not neurology.

The author, in an interesting and thorough manner, goes into the history, etiology, pathology and treatment of narcotic addiction. The treatment is described in great detail and emphasis laid on strict adherence to the detail for beneficial results.

To one who has been accustomed to classify narcotic addiction as a vice, this book will be a revelation.

SURGICAL SUGGESTION.

A not uncommon cause of persistent pain in the knee is bursitis sartorius, semimembranosus beneath the inner hamstring tendon insertions. — *American Journal of Surgery*.

PRACTICE FOR SALE

\$1,500.00 established practice in pleasant country village on railway line. A chance to greatly increase practice. House for rent or for sale on easy terms. For further information address

I. W. GILBERT, M. D., Litchfield, Me.

County News.

CUMBERLAND.

PORTLAND MEDICAL CLUB.

The ninth meeting of the year was held at the Columbia hotel on November 6th, twenty-five members being present.

Drs. Gehring and Drummond were elected to serve with the Secretary as a committee to arrange for the annual banquet and map out the program for the ensuing year.

Dr. A. P. Leighton, Jr., reported a case of missed abortion with retention of the ovum in utero for 318 days.

Dr. Burr added to his report of last month on a case of intestinal sand, presenting the chemical report of analysis and further specimens of the sand.

Dr. Driscoll reported a case of missed abortion with retention of the ovum for six months.

Dr. P. W. Davis reported a case of lobar pneumonia in a child aged eleven months, followed by pyelitis. The case was treated with colon vaccine and large doses of urotropin.

Dr. Gehring reported three cases of pellagra occurring in people who had never been out of Oxford County, in which the etiology was not fully established.

Dr. Allen reported a case of rheumatic arthritis in which almost immediate relief was produced by proper treatment of caseous tonsils.

Dr. Warren reported a case of arthritis with caseous tonsils, also in two cases of suppurative tonsilitis, one followed by cholecystitis, and the other by arthritis, pericarditis, endocarditis, acute pleuritis, and finally death.

The paper of the evening was by Dr. John H. Allen, his subject being "The Conservative Treatment of Chronic Suppurative Otitis Media." The detailed reports of six personal cases were incorporated in the paper, which was ably discussed by Drs. Spalding, Smith, Gilbert and Fisher.

R. B. MOORE, *Secretary*.

The annual meeting of the Cumberland County Medical Society will be held at the Congress Square Hotel, Friday, Dec. 19th. They have been fortunate in securing as essayist for the evening, Dr. L. T. Sajous of Philadelphia, who has written extensively on the subject of ductless glands and will speak on "The Various Forms of Goitre and Their Treatment."

A cordial invitation is extended through the Journal to the members of the Maine Medical Association, and we sincerely trust that all who can will take advantage of this opportunity.

Kindly notify the secretary, Dr. P. P. Thompson, of Portland, if you decide to attend, so that arrangements can be made for the banquet.

ANDROSCOGGIN

The regular meeting of the Androscoggin County Association was held in the Municipal Court Room, City Hall, Lewiston, Me., Nov. 4th.

A paper on "Kidney Lesions" was read by Dr. Harold Garcelon and discussed by the members present. At a previous meeting, a committee was appointed to consult ways and means of doing more and better charity work by causing persons who could afford to pay, at least something for their work, to do so. This committee drew up the following form, copies of which the secretary was instructed to send to the Boards of each hospital, State Board of Charities, State Secretary and Maine Medical Journal.

To the Directors of the Central Maine General Hospital and the Board of Managers of St. Mary's General Hospital:—

In order that more of the deserving poor may receive free treatment in our hospitals, the Androscoggin County Medical Association requests that you charge an operative or treatment fee for all hospital cases in private rooms, depending upon the circumstances of the patient or the one responsible.

The Association, of course, feels that too much cannot be done in the way of free treatment for the really needy, but that it is not just that people amply able to pay, should be so treated, and that it is an abuse of charity.

This request should not interfere with the physician or surgeon on duty, having a ward case in a private room, if in his opinion the patient's condition demanded it. We would not expect patients amply able to pay for private rooms, to occupy ward beds.

The method of obtaining the financial condition of the patients and the disposition of the fees will be left with the Board of Managers of each individual hospital.

S. E. SAWYER, *Co. Editor.*

SAGadahoc

The quarterly meeting was held at New Meadows Inn. Dr. W. E. Kershner read a paper on "Tonsils and Adenoids." Only five of a membership of eighteen were present. The next meeting will be held on the fourth Wednesday of January, 1914.

R. C. HANNIGAN, *County Editor.*

PENOBSCOT.

The sixtieth annual meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday evening, Nov. 18th, the Vice President, Dr. George E. Landry of Old Town presiding.

As there was no business to come before the meeting, the election of officers was proceeded with. Dr. George E. Landry of Old Town was elected President, Dr. Bertram L. Bryant of Bangor, Vice President, Dr. John B. Thompson of Bangor, Secretary and Treasurer and Dr. Daniel McCann a member of the Board of Censors for three years.

Twenty-six members sat down to supper, after which the paper of the evening was given by Dr. William C. Peters, President of the Maine Medical Association. The subject was "Fractures," illustrated by lantern slides. A very interesting and instructive evening was thus passed.

J. B. THOMPSON, *County Editor.*

Hydroleine

**An ethical emulsion of
cod-liver oil without
medicinal admixture.**

The manner in which the purest and freshest cod-liver oil is emulsified in Hydroleine, makes it easily digestible. Furthermore, Hydroleine does not offend the taste. Its nutty and distinctive flavor is liked by the most delicate palate, and children take it willingly.

In practice it is markedly utilizable, and is reliably stable. It is effective as a food-fat and possesses superior characteristics.

**In Long-continued Professional
Use Hydroleine Has Proved
Its Dependability**

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York

Sold by druggists

Sample sent to physicians on request.

Personal News and Notes.

The State Board of Registration met at Portland, Nov. 18 and 19.

Drs. P. P. Thompson and H. J. Everett have returned from a European trip.

We are glad to observe the opening to the public and the poor of the new Herman Knapp Memorial Eye and Ear Hospital in New York. Dr. Knapp was one of the world's great ophthalmologists, was a leader in operative and literary ophthalmology and it is pleasant to see his name commemorated in this manner.

The following members of the Maine Medical Association were in attendance at the Clinical Congress of Surgeons, held in Chicago, Oct. 8, 9, and 10: Dr. F. W. Mann, Dr. F. H. Jackson and Dr. F. W. Mitchell of Houlton; Drs. S. W. Boone and E. H. Doble of Presque Isle; Dr. A. B. Hagarthy of Ashland; Dr. G. A. Gregory of Boothbay Harbor; Dr. L. K. Austin of Waterville; Drs. E. E. Holt, W. L. Cousins, E. G. Abbott, A. Mitchell and F. Y. Gilbert of Portland; Dr. S. A. Andrews, Rumford, Me.

NOTICE.

United States Civil Service Examination. Chief Mine Surgeon (Male.)

December 8, 1913.

The United States Civil Service Commission announces an open competitive examination for chief mine surgeon, for men only. From the register of eligibles resulting from this examination certification will be made to fill a vacancy in this position in the Bureau of Mines, Pittsburgh, Pa., at a salary ranging from \$2,400 to \$3,600 per annum, and vacancies as they may occur in positions requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

The duties of the person appointed to fill this position will be to investigate and report upon health conditions in mines and at mining towns, to outline and direct methods of first aid instruction to miners, to attend mine disasters, and to direct and make pathological and physiological studies concerning the effect upon the human system of poisonous gases, death by shock at mines, and similar subjects. For further information write to the United States Civil Service Commission, Washington, D. C.

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.
Proof-sheets will be sent to the author when requested to do so.
Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.
The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

JAN., 1914.

No. 6

* PROPHYLAXIS IN THE ARMY.

BY DR. WILLIAM H. WILSON, MAJOR MEDICAL CORPS,
FT. McDONALD, CAL., U. S. A.

The army medical officer differs from his professional brother in civic life, by trying more to prevent disease among the personnel, and thereby keeping the effective strength as high as possible, rather than by curing the cases of illness after they occur. This is not said to the disparagement of the civilian practitioner, for he has not the chance to prevent outbreaks, nor the authority to enforce measures to cut short threatened epidemics, except through local Boards of Health, and these sometimes have reasons other than sanitary for not enforcing too rigid regulations.

Particularly since the Spanish war has the army medical department made rapid progress in the field of preventive medicine, for at that time the attention, not only of it, but of the whole world, was called to the appalling amount of sickness which occurred in nearly all camps of troops in this country, and stimulated all of us to see that repetitions of these sad occurrences did not take place.

One by one the different diseases are coming under the head of preventable, and in this the army is holding up its end of the work. Yellow fever, cholera, dysentery, malaria, dengue, and last but not least, typhoid fever are fast becoming negligible quantities, and it is hoped that soon venereal disease and tuberculosis may be added to the list of preventable diseases.

The object of this paper is principally to deal with the preventative measures adopted, and now enforced through orders of the

*Read before Maine Medical Association, July, 1913.

surgeon general, in the prevention of typhoid fever and venereal diseases.

This latter class of disease is the chief cause of loss of time and duty in the army, and, if any absolute preventative could be found, it would be welcomed by the army more than anything else.

Measures of various kinds have been instituted from time to time at posts and by individuals, but it has only been during the last few years that systematic and regular inspections of the men have been made by the medical officers, and if cases of disease are found, they are immediately taken on sick report and put under restriction and proper treatment. For these inspections, the men are stripped and they file by the medical officer slowly, allowing him to carefully inspect his whole body, and particularly the genitalia, and see if any disease exists. Such as are found diseased are immediately put upon sick report and sent to the hospital for further examination and treatment. If thought best, they are taken into hospital, or placed on restriction and kept in the post, and are required to report at the hospital several times daily for treatment. This is continued until they are thoroughly cured and fit for full duty.

These inspections are made by the medical officers twice monthly, at times which are previously unknown to the men, so they cannot specially prepare for them, and thus deceive the examining surgeon. The men do not have to be found at these inspections, but may come on sick report and get treatment at any time, and many choose this method because they do not like being picked out in front of the others.

As can be readily seen, it is unjust for men suffering with these diseases to lay in hospital while the well men are doing their duty about the post or camp. Consequently, when this was brought to the attention of congress, they, at the last session, passed a law stopping the pay of any officer or enlisted man who is unable to perform his duty from any disease or injury caused by his own misconduct. This measure was strongly recommended for several years by the medical department before it was finally passed by Congress.

Other measures are also taken for the prevention of these diseases. Where men wilfully expose themselves, they are ordered to report to the hospital as soon as possible after their return to the post, where one or more men are instructed in the giving of the following preventative. The man's genitalia are washed carefully with soap and water; he is then given an injection into the urethra of a two per cent solution of protargol or ten per cent argyrol, which is retained for five minutes. Then the penis, particularly the glands and prepuce, are well anointed with an ointment containing thirty

per cent of calomel, and the parts are then wrapped in a piece of soft tissue paper to prevent soiling the clothing.

The same preventative measures were in force at my last station in the Philippines, and where there was a very large venereal sick list, between three and four per cent of the command, with the result that less than five per cent of those who availed themselves of the treatment developed the disease, and these included all those who purposely deceived us, as they might do in one of the following ways: by exposing themselves for several days in succession and coming up for the treatment but once, so as to escape punishment; or by waiting until the premonitory symptoms appear, and then rushing to the hospital for treatment, and waiting a few days more before coming on sick report with the disease. In either of these instances, the records show the man to have taken the prescribed treatment, and he thus escapes punishment, but counts as a failure for the treatment. I would have said that all men who do not report for this preventative treatment after exposure, and who develop disease, are tried by court martial and punished.

Temperance in the use of alcoholic stimulants is another, though indirect, way of modifying venereal diseases, because the man who is stupefied with alcohol loses in a great measure his self-respect, and does not care where he goes or what he does, and often he indulges in sexual intercourse and takes no precaution afterward regarding cleanliness or other preventative measures for his good, due to the effects of the alcohol.

Many believe that the "K" packet, which usually consists of a double ended compressible tube, one end containing a solution of argyrol or protargol, and the other an ointment similar to the one described above, carried in the vest pocket and used immediately after intercourse is a good measure; but this can only be depended upon when the man is in possession of all his faculties, and is careful to use it properly after cleansing the parts, and he will not do this as a rule, when he is partially stupefied from alcohol. I believe the "K" packet, as made by several reliable houses, is a valuable preventative when promptly and properly used.

In this connection too, comes up the matter of instruction in these diseases, and when this can be done by properly posted men and by a series of lantern slides, the lesson becomes very impressive to an audience. But I am not in favor of giving these to boys under eighteen or twenty years of age, depending upon their development and temperament. These are carried out to a limited extent in the Army posts, where the material is available, and I hope with some benefit to the men.

It is frequently stated that this class of disease exists to a greater extent in the army than in civil life, but of this I am not so sure. In a thousand young men in civil pursuits similar to those from which the enlisted men of the Army come, there will be found as many or more suffering from disease of this nature, as there are among the enlisted personnel, but they have to go about their work and no record is kept of them, while in the Army an accurate record is kept of each and every case. Until some check is placed upon these persons, by causing them to be registered or other means, it will be hard to lessen the number of cases.

As will be noticed, I wish to lay most stress on venereal diseases and typhoid fever, for the reason that these two diseases have been the great sources of disability in the Army for years past, and only recently has prophylaxis of a practical nature been inaugurated with some success. Furthermore, our Army has suffered more than all others with venereal disease, and for this reason it behooves us to try and reduce it as far as possible.

I shall now quote a few facts and figures from the last report of the Surgeon General of the Army on these two subjects. In the year 1911, in the Continental United States, the rate per 1,000 for all venereal diseases was 163.85, divided as follows: Gonorrhea, 94.52, chancroid, 25.04; syphilis, 44.30. In comparing these figures with the preceding year, it shows a decrease of 7.92 in gonorrhea, 1.38 in chancroid, and an increase of 17.65 in syphilis, or a total increase of 8.35 per 1,000. But when we come to analyze these figures, the increase is more apparent than real, for it existed before, but owing to better methods of diagnosis by the Wasserman test and the treatment by Salvarsan, many cases of syphilis have no doubt been found and treated which would never have been known but for these measures. Over 2,100 cases were treated by Salvarsan in the Army in 1911. On the other hand, the decrease in the two other diseases can be ascribed to the preventative measures carried out in the service during that time, and I believe this decrease will be maintained this year and hereafter until the minimum is reached.

In the Philippines "venereal diseases still hold first place for both admissions and non-effective rate. Nearly one-third of the total number of admissions for disease was due to venereal diseases." The rate for 1911 showed an increase here, too, over 1910, except in gonorrhea; in this there was a decided decrease. The rate for gonorrhea, chancroid and syphilis was respectively: 138.59, 88.48, and 78.05. And for 1910, 170.07, 60.85, and 44.72. The increase here can also be accounted for by the increased accuracy in diagnosis,

and in the taking up of a great many more cases for treatment by Salvarsan.

At the post where I was stationed during this time, out of a mean strength of 1,201, there were 615 admissions, or a rate of 512.07 per thousand, or over 50% of all causes of admissions.

Another point of interest which I observed over there was the very large number of complications following simple cases of venereal disease. These could only be accounted for by the lowered resistance of the men or by a more virulent strain of the causative agent than is seen here. The same measures of prophylaxis are in force there as here, and it was over there that regular and systematic inspections of the men were first made.

It is also of interest to note how these diseases affect the Philippine Scouts, the native soldiery. The non-effective rate was 3.63 per thousand, and the admission rate 58.11, or only one-eleventh of the total number of admissions for disease, while among the Americans they caused a little less than one-third of the total admissions for disease, likely due to the fact that a large percentage of them are married. Although that tends to lessen the venereal cases among them, it tends to increase the malarial rate due to their sleeping out of barracks, and hence not protected by mosquito bars, as all persons in the military service over there are required to be. Another point in this connection, one scarcely ever sees a Philippine Scout under the influence of alcohol.

So far, in this paper, I have spoken almost entirely of venereal diseases and their prophylaxis. The rest of it I wish to devote to the great advances made in the prevention of typhoid fever, that great bug-bear of mobilization camps in the Army, up to within the past ten years, and now held under almost as full control as is small-pox.

Of course much has been done in sanitary science in the Army in the betterment of camp life, as well as post life and sanitation to decrease epidemics of all kinds, and in this group is typhoid fever.

But in addition to all these measures, the vaccination against typhoid holds a high place, and it is of this, principally, I wish to speak. This practise was brought out by Wright and others in the British service first, and used quite extensively in India, and also in the South African war. There it was noted that those who had been vaccinated, for it was voluntary, did not take the disease so readily, and among those who did, the disease was of a milder type and the death rate was much less. But it remained for officers of our own corps to really put it on a good and practical basis.

Surgeon General O'Reilly had a Board convened in Washington, consisting of several physicians in our large cities, who were also members of the Army Medical Reserve Corps, to decide upon the usefulness of this vaccine in the Army, especially in large camps.

This Board, of which he himself was President, decided that it was harmless and would be a means of lessening the disease in the Army, and the use of it was then made by giving it to all who volunteered, of whom there were a great many. It was later made compulsory in the Army for all persons up to the age of forty-five years, unless they were already protected by a recent attack of typhoid fever.

I shall not attempt to describe this vaccine as it is familiar to all persons in attendance here, but will say that it consists of a culture of the Eberth bacillus taken up in normal salt solution, which is then subjected to heat, killing the bacilli, and a small amount of preservative, as cresol or phenol, added. This is put up in small ampules containing one cubic centimetre, containing one billion bacilli to each C. C. One-half a C. C., or half a billion bacilli are given at the first dose by hypodermic injection into the arm, and one C. C., or one billion, are given at the second and third doses, allowing ten days interval between injections. A very slight local reaction follows this for a few days, and sometimes a mild to moderate general reaction, but nothing of any consequence, and, so far as I know, there is no danger of any complications.

It was due to the present Surgeon-General, that the compulsory vaccination was ordered in 1911, and this vaccination is renewed upon each re-enlistment of the soldier after the first inoculation. All the vaccine is prepared in the laboratory of the Army Medical School in Washington, under the direction of Major F. F. Russell of the Army Medical Corps, who has done more than anyone else in having it adopted and the credit of its successful use is largely due to him. I believe this vaccination is now compulsory in the Navy, the same as in the Army.

Many instances of its beneficial effect in the Army are known, as at the large encampment in Texas in 1911, when but two cases of typhoid fever occurred in about 12,000 men present, one in a soldier and one in a civilian teamster, who had not been vaccinated. This was our first good demonstration of its value and others have followed.

In the entire Army in 1911, there were seventy cases of typhoid, eleven of which were in immunized persons, as against fifty-nine in non-immunized persons.

All of our cases are confirmed in the diagnosis by a blood cul-

ture, as the Widal test is of no service in immunized persons, as this becomes positive after the first injection.

The United States Army is the only one in which this immunization is mandatory, and I hope that the time is not far distant when all members of the militia of the various States will also be compelled to take it, as well as the vaccination against variola.

At a recent inspection of the State Hospital Corps of this State, I made the recommendation that all members of the command be given the typhoid prophylactic, and hope this will be approved. The medical officers promptly said they would be glad to take it and thus set an example to the others.

I have recently read a report that last year there occurred eighteen cases of typhoid in the Army. Of these, twelve were in recruits, or non-immunes, and three others were para-typhoid, which leaves only three cases among the immunes — a rather good showing.

It will be seen that, when all the militia are compelled to be vaccinated against typhoid, how much safer a young man's parents will feel about their son, when they think of the fearful number of cases in 1898, and now realize that their boy is likely immune against this dreadful disease. I hope if there are any medical officers of the militia present, that they will give this subject their serious attention and not be content until they have all their men of their organizations made immune against this dread monster of all camp life.

It is believed that if city councils would pass laws making this practise compulsory, as school boards do for variola, that the disease would soon begin to diminish in our cities, in some of which typhoid contributes largely to the death rate.

There are many contributions to the literature of typhoid prophylaxis, among which is one by Louis and Combe of the French Army.

They report one hundred and fifteen cases of typhoid fever among the unprotected on the Algero-Moroccan frontier in 1911, but none among the vaccinated.

Similarly, in the Avignon epidemic in 1912, the 687 unvaccinated soldiers had one hundred and fifty-five cases, with twenty-one deaths, while the thirteen hundred and sixty-six protected soldiers had no cases at date of publication.

In an article by Major Russell, recently published in a medical journal, he reports vaccination of three hundred and fifty-nine children, aged from two to sixteen years, with no cases of typhoid fever among them. While in 1909, there was a total of thirty-three hundred and sixty-six deaths from typhoid in patients under twenty

years of age in this country. He says a very large proportion of these deaths can, without doubt, be prevented by the more frequent use of anti-typhoid vaccine.

These are only a few instances of this kind, and I do not wish to quote more for we all read of them in the journals almost daily. I would advise its use in all our friends going to summer resorts where no doubt many cases of typhoid frequently originate and break out on the return home.

In this paper, I have only partially covered this large subject, but wish to impress upon all the importance of prophylaxis, particularly in these two diseases, for they are both conditions where a great deal can be accomplished along the lines indicated.

Extract from the Army and Navy Journal, June 7, 1913.

"The work of English Medical Officers in making soldiers immune against typhoid fever by the injection of the germs of typhoid fever which had been killed by heat, has been studied, improved and applied with remarkable success in the American Army, which is to-day the only army in the world, which has been rendered immune against this formidable disease. This disease, which caused such havoc in the Spanish war among the American Volunteers, has now been almost banished from the army, no cases having occurred among the fifty-eight thousand men stationed in the United States, since December 9th, 1912.

That these figures have not been produced to any degree by a rejection of doubtful cases is shown by the fact that there has been at the same time a steady decrease in the number of cases of fever of doubtful origin, the number of those in 1912 being less than one-third of the number ten years ago.

Very good results have followed the adoption of this procedure in the United States Navy, in which typhoid fever has been practically wiped off the sick list.

The serum which has produced these remarkable results in both services, has been prepared in the laboratory of the Army Medical School in Washington.

The admission rates in the army have been as follows: 1903, 5.82; 1904, 5.62; 1905, 3.57; 1906, 5.66; 1907, 3.53; 1908, 2.94; 1909, 3.03; 1910, 2.32; 1911, .80; 1912, .26.

Vaccination was made voluntary in 1909 and compulsory in 1911. The death rate was reduced from .28 in 1903 to .03 in 1912."

DISCUSSION.

PRESIDENT: The paper is now open for discussion. The discussion was to have been led by Dr. Bradbury of Norway, but Dr. Bradbury has written me that he would be absent in Gettysburg, and Dr. Mitchell of this city who was also named to discuss the paper, I am informed is absent also, consequently the paper is now before the house. Has anyone anything they would like to say on this subject?

DR. DICKISON: I would like to ask Dr. Wilson how long this immunization lasts.

DR. WILSON: The instructions given when the vaccine came out was that it was not to be given where the patient was sick with the fever, or anything of that kind. It was to be used as a preventative measure only and not in cases of illness. It is used entirely as a preventative so far as my experience goes. Personally, I have not seen a case among the soldiers since 1904, where I have been stationed, at any of the posts. I have not seen a single case and that is a pretty good record.

DR. DICKISON: Do you know how long this immunization is supposed to last?

DR. WILSON: I don't know how long exactly, but I should say it would last three years at any rate, and it probably lasts longer, but that has not been definitely decided.

DR. EDSALL: I would only say to physicians interested in hospital work, particularly in connection with the typhoid fever, that inoculation seems to protect the hospital against this disease. It has been carried out in the Massachusetts General Hospital for several years past. Practically all the nurses are inoculated and all the interns and a good many of the staff of hospital orderlies, if they so desire. The result has been that it has entirely wiped out typhoid in the nurses there, and also of course amongst the physicians and orderlies who have been inoculated; they have been entirely free from it after once infected. I should say it is decidedly a successful preventative. The men I know who have worked with it most extensively and who have had a great deal of experience in its use, are distinctly opposed to using it in cases of disease. There appears to be but the one period where it may be useful, unless perhaps in cases of long drawn out illness and exhaustion after typhoid fever. When the infection is very largely burned out, it may be useful and I believe satisfactory results have been obtained in these cases, but I do not know the facts of these experiments as well as of the former.

DR. ROBINSON: A soldier came into camp here who had received that treatment. He had no typhoid about him at the time, but a year after that he contracted typhoid and died.

DR. WILSON: It does not absolutely protect the men perhaps, but it has reduced the trouble amazingly. It is possible this man of whom Dr. Robinson speaks is one of the exceptions, but it is certain that this treatment has been most effective in stamping out the trouble. It is interesting to know that over thirty of the hospital corps and a great many others throughout the State—a great many medical officers, have taken hold of it and are doing what they can to push it along. I think I have nothing further to say. I thank you, gentlemen.

***HEROINISM.**

BY PAUL K. SELLEW, M. D., BROOKLINE, MASS.

The drug evil has been and is a serious problem.

In fact it is so important a subject that the president saw fit only last April to send a message to Congress regarding it.

Indeed, it is of such great vital significance that the nations of the world even now are about to hold a conference upon it.

More than one million addictees in the United States are slaves to this curse. There is enough of this drug imported and consumed annually in this country so that, if each person in this sepulchre of freedom were using it, he would average one grain of opium daily.

From the statistical standpoint alone, therefore, opium and its derivatives are important.

While the significance of the addiction to morphine, opium's first-born, has been partially recognized, another, a grandson, because of its comparative youth, has as yet failed to attract the attention its growing pains warrant.

Heroin, a synthetic derivative, the diacetic ester, of morphine, is a real opiate, capable of forming an opium habit and carries with it more risks than the parent drug itself.

It is high time that physicians should be warned that this narcotic is not a harmless sedative, that it is not to be prescribed with immunity from the formation of a habit.

They should be alive to the increasing prevalence of this addiction. It is too frequently prescribed for coughs and colds.

Early enthusiasm for this drug leads many practitioners to use it even for the cure of the morphine habit. Narcotic addictees, in a similar attempt, find it second only to cocaine as a drug to be avoided.

The impropriety of substituting heroin for morphine is serious on account of the greater toxicity and the greater difficulty met with in the course of weaning.

From a chemical standpoint, the substitution in the morphine molecule of the two acetic radicals for two atoms of hydrogen does not appear sufficient reason for any diminished toxicity on the part of heroin. Right to the contrary, however, it could do nothing else than augment the undesirable effects.

The therapeutic uses of heroin are similar to morphine except that it is generally considered to act better as an elective sedative, for all the organic causes of violent cough and dyspnea.

Cushny is inclined to doubt its superiority in any respect.

As an analgesic it is analogous to the action of morphine but about three times as powerful.

The respiratory odification constitutes the most important phenomenon from a toxic as well as a physiologic standpoint.

In some cases a single injection has caused syncope followed by grave symptoms of poisoning.

Heroin is ordinarily excreted in a large measure by the kidneys while a smaller fraction may pass out through the bowels.

But with growing tolerance for the drug it is destroyed in increasing proportion in the body.

The general symptoms and signs commonly found in chronic morphinism such as dry, sallow skin, contracted pupils, emaciation and decreased mental and physical activity are also found in heroinism.

But in heroin addiction the physical and mental torpor is much more marked and the consequential lowered resistance more profound.

An advanced stage of narcotism appears earlier in heroinism than in morphinism and rarely, if ever, do patients of equal physical development to begin with, reach the same degree of hebetude under the chronic use of the latter as of the former.

A symptom rather characteristic of heroinism which seems not to have been mentioned by previous observers is that it tends to produce a more intense weakening effect upon the eyes than does the parent drug. This is very likely an atonic accommodative asthenopia.

Where heroin is used by snuffing some of the patients have a chronic rhinitis which may show ulcerations similar to those found in cocaineism.

Lack of time will prohibit me from but briefly summarizing the cases I have observed which will illustrate the salient features of this addiction.

The first five cases were treated by the Towns-Lambert method.

Case 1. This patient, a prominent surgeon, aged 48, began the use of heroin nine months before his entrance into the hospital.

The cause was an acute anthritis.

His reason for choosing heroin as an analgesic was that the literature led him to believe it would not form a habit.

During this time he averaged six grains daily by the mouth.

Nineteen days after entrance, including an intervening attack of broncho-pneumonia, lasting nine days, the patient was walking out of doors. On the 22nd day he took an 800 mile journey.

Although a year has elapsed he has not resumed.

Aside from the usual consequences of a narcotic addiction this patient complained of "weakness of the eyes," and profound debility, which persisted over a longer period than would be expected after morphine withdrawal.

Case 2. Female, aged sixty. Patient is a highly neurotic individual, with a similar family history.

For numerous chronic physical disturbances in the pelvic viscea she was given morphine and, later, heroin by suppositories.

In this manner she averaged over one grain of heroin daily, for over two years.

Upon entrance she was in a state of delirium.

Soon after entrance the patient had a syncepal attack lasting several hours, in which it became necessary to resort to artificial respiration for two hours.

Although she was given morphine and heroin, as well as the other usual stimulants, she did not recover her regular breathing for over six hours. She too, had very weak eyes and was much debilitated.

The delirium lasted for twelve days.

Owing to her intractible condition, the treatment was not instituted for several days, but thirteen days after entrance she received her last dose of heroin.

One year later she was reported to be traveling in Hawaii, free from any drug habit and in excellent health.

Case 3. Student, male, aged twenty-five.

This patient has a family history showing a strong neurotic taint.

As a young man he inhaled thirty to forty cigarettes daily, also drank liquor excessively. One year before entrance, out of "pure foolishness," he tried the effects to be obtained by snuffing heroin, which, at first, exhilarated, then stupefied him. Under its constant intoxication, maintained by an average daily dose of nine grains, his appetite for liquor vanished and his ambition became bankrupt.

He, too, complained of weak eyes. He entered on October 17, 1912. On the 20th he received his last dose of heroin.

One week later, all discomforts had disappeared and he slept eight hours nightly without hypnotics.

During the treatment he lost six pounds all of which was regained inside of the month. On the thirteenth day after entrance, he was discharged feeling well.

Five months later he committed suicide by poisoning. Previous to this he had been working steadily as a street car conductor.

Case 4. Male, 22. Building foreman. Family history is good.

Having learned to smoke opium, he soon acquired the habit of

snuffing heroin. For sixteen months, he averaged six to ten grains of this daily. In addition to this he used *cocaine frequently* in the same manner, and was a constant inhaler of cigarettes.

Three days after entrance he received his last dose of heroin, after which he required only five doses of an anodyne.

One week after entrance, he slept without a hypnotic and from then until his discharge at the end of two weeks, no analgesic nor hypnotic was used nor required.

During the two weeks he lost and regained four pounds.

That the prognosis was bad on the account of his addiction to cocaine, as well as heroin, was proven when it became necessary to commit him to an insane institution about four months later.

Case 5, male, single, thirty-two.

This patient might be designated a fiend, for he is a tenderloin sport, a subject to chronic narcotism lasting over three years.

The following constituted his daily food:

7½ grains heroin by snuffing.

25 to 30 grains of morphine hypodermically.

35 to 50 grains of cocaine hypodermically.

40 to 60 cigarettes by inhalation.

The fact that his physical condition remained fair because of his previous training as a prize fighter, seems to be the only explanation to offer for his being alive at present.

Two days after entrance he received the last dose of any of his habit narcotics. From the sixth day, he did not require nor receive an analgesic nor hypnotic.

From then until his discharge on the tenth day, he slept well each night.

He lost his craving for the drugs and during his entire stay suffered nothing more than a slight discomfort which was easily relieved. His strength was regained slowly.

During the treatment he lost five and one-half pounds and regained one.

This patient, of course, had a bad prognosis on account of his environment and the extent to which he had become a drug habituee.

For three months, he continued abstinent, and then he began to use liquor.

Within the past month, two physicians, formerly heroin addicts, came to me for treatment for morphinism.

One, although preferring the exhilarating effect of heroin, found it was so weakening that he again resorted to morphine.

A prominent physician treated the other for his heroin addiction by the hyoscine method.

Nine months after this the physician indulged himself in a few bracers of morphine.

He had acquired the heroin habit in an innocent way, by treating himself for a cough with a common cough syrup (cocillana compound).

Before the habit was already developed, he had not realized that there was even such a possibility.

The following four cases which have recently come under my personal observation, illustrate the too common uses of heroin.

Each of them knew many others.

In personally investigating this subject, I myself have seen several hundred heroin devotees, many of them women, who are very easily to be found in the public cafes in large cities.

Case 6. Male, forty-one. Single, gambler.

For ten years this patient smoked opium and ate morphine.

During the past year and a half, he snuffed heroin, averaging five hundred $1/12$ grain tablets per week, by snuffing—about six grains daily.

Case 7. Male, single, gambler.

He smoked opium for twelve years. During the past year he has displaced it by snuffing an average of three grains of heroin daily.

Case 8. Male, married, gambler.

He used morphine and opium for twelve years until three years ago, when he began to snuff heroin. Three years of addiction to the latter proved more disastrous to him than twelve years of the former.

His eyes have become exceedingly weak and breathing very difficult. In fact, unless he uses the needle every fifteen minutes dyspnea is marked.

When I examined him he was addicted to the following drugs daily: 25 to 75 grains of heroin daily by snuffing. 5 to 10 grains of morphine hypodermically. $1\frac{1}{2}$ pints of whiskey. 2 ounces of tobacco by inhalation.

Case 9. Male, single, 28, gambler.

This patient formerly averaged 15 grains of heroin daily, by snuffing, but has managed to give it up by replacing it with morphine and cocaine.

The last four cases have as yet remained untreated for various reasons.

In comparing the effects of the chronic use of morphine and heroin, we cannot fail to be impressed with the fact that heroin addiction affects more profoundly than does morphinism, all the more important functions of the body.

After the deheroinization, although the process of recovery is slower and more trying than that following the weaning from morphine, yet convalescence takes place with good results eventually.

The organism, however, reacts far less satisfactorily, owing to the fact that it has fewer healthy cells to draw upon at the moment of rehabilitation.

Normal appetite and sleep are slow in their readjustment.

Serious syncopes, insidious in onset, of respiratory origin, more frequently occur in heroinism than in morphinism.

They do not respond well to stimulants, nor will heroin itself relieve the respiratory failure.

To avert this possible contingency, Jennings of Paris, advises the substitution of morphine for heroin as soon as possible.

It is my experience that codein should be used for this purpose in many cases.

In the medical literature, I have found records of thirty-eight cases of heroinism, but these do not begin to indicate the prevalence of the habit.

Heroin is administered to the body by all the usual means, but the fiends crush or "cruise" the soluble tablets between folds of stiff paper, and snuff it from the paper or the back of the hand.

I have seen cigarettes doctored with it and sold on the streets.

Only a few days ago, there was a newspaper account of heroin being sold freely to young girls, but sold in the form of cough tablets. Many of the cases reported began the use of heroin in an effort to cure themselves of the morphine habit.

The acute manifestations of the heroin habit are illustrated by the author's case 2, and that reported by Glasow.

The cases of three physicians, one reported by Phillips, and two mentioned by the author, who became addicts unwittingly because they had read the literature of firms advertising preparations containing the drug which led them to believe that heroin did not form a habit, illustrates only too forcibly the ignorance of some of the medical profession in regard to that possibility.

As a matter of fact, I do not know of a text book on pharmacology in common use, that lays stress on this point.

Heroin is a habit forming drug.

The chronic use of this narcotic is on the increase because of three factors, namely, its inherent stimulating qualities, the ease with which it may be obtained, as compared with the other opium derivatives, and finally because of the somewhat general belief that heroin does not form a habit.

The frequent use of heroin entails a habit as quickly and even more firmly fixed, than morphine produces under like conditions.

Heroin has all the disadvantages of morphine and carries with it more dangers.

A much more pronounced physical and intellectual debility is reached in less time under the habitual use of heroin than of morphine.

The deprivation from heroin is more difficult, more painful and more dangerous.

The convalescence from heroinism is much slower and the reaction more frequently less successful than from morphinism.

Whenever a physician considers it necessary to prescribe a potent sedative, he should think of morphine rather than heroin.

In prescribing or administering drugs known to form a habit the physician should remember that a large proportion of drug addicts have become such only as the result of ignorance or of a too great complaisance on the part of a physician, either of which is sometimes almost criminal.

Heroin is a fair example of a morphine derivative and of what may reasonably be expected following their constant use.

Thus dionine—methyl morphine—analogue with heroin in that it is a morphine derivative, and analogous in that it forms a habit, since cases of its addiction have been reported by Comar, Buvat and Sellier, is also analogous in that it has been advertised as a non-habit forming narcotic, and even as a cure for the morphine habit.

In these days of numerous new remedies, claims of promoters of ethical proprietary medicaments should be considered from a financial as well as a therapeutic standpoint.

Our law makers are fast recognizing the fearful dangers following the sale and use of cocaine, and are enacting stringent statutes relative to the same.

Heroin is but little less dangerous than cocaine, and the ease by which it may be obtained and the habits it is creating, warrant similar restrictions.

Results are what interest practical men, so I am often asked:

"What percentage remain free from their addiction after receiving the Towns-Lambert treatment?"

Dr. Lambert is inclined to put it at about seventy-five per cent, but although to me this seems too high a rating, yet if it were one-quarter of this I should call it successful.

The prognosis of drug addiction cases depends upon two, possibly three factors.

As far as the drug is concerned, the seriousness of the habit depends, not so much, as is generally believed, upon the amount of

the drug taken, as upon the duration of the addiction, plus the method of administration.

Codein, opium, dionine, morphine, heroin and cocaine, in order stated, each form a more serious habit so far as the prognosis can be made, but proper treatment can remove the craving for all of these drugs.

From the standpoint of the individual there must be sufficient gray matter remaining for him to be capable of formulating his own desire to quit, backed up by a remnant of determination.

A suitable environment will, of course, assist the former addict to maintain his freedom.

The element of time also enters into the case.

If a patient can refrain for one, two, three or four months without his narcotic, and without a desire for it, is there any reason why he should resume the habit at any time?

Is he cured?

If he yields to some slight temporary depression or strain after a twelve month freedom, and then resumes his burden, was he cured?

You see it is almost absurd to use the word "cure."

You can lead a horse to water but you cannot make him drink.

You can put a man on his feet.

You can set free the chains that bind him.

You cannot stand guard over him for all time thereafter, to keep him from falling and from reapplying those shackles, if he so desires.

Some one has said "Booze deducted from nothing leaves nothing."

The same might be said of drugs.

REFERENCES.

- G. Strube, *Med. Rev.*, St. Louis, XXXIX, 1899.
G. Strube, *Berliner Klinischer Wochenschrift* No. 45, 1898.
Tauszk, Ujabb Zyogyszer, es Gyogymod, Budapest, 1898, 12-14.
Lang, *Med. Times and Reg. Phila.*, 1899.
Lee, *Deutsche Med. Woch.* Mar. 23, 1899.
Morel-Lavalle *Rev. de Medicin*, Nov., Dec., 1900.
Morel-Lavalle *de Neurologic*, 1901.
Pouchet, *Trans. Soc. de Therapeutique*, April, 1902.
Jennings, *London, Lancet*, Aug. 10, 1901.
Pettey, *Alabama Med. J.*, p. 174, Vol. 15.
Le Marchand, *Pamph.*, Paris, 55 pages, 1903.
Giannelli, *Giordi Psichiat clin. Ferrara* XXXI, 41, 50, 1903.
Crha, *Heilkunde*, Vol. 7, 204, 1903.
Montagnini *Reforma Med. Palermo - Napoli*, XX, 963, 1904.

- Comar 7 Buvat, Presse Med., Paris, July 6, 1904, p. 1428.
 Atwood, N. Y. Med. Record, LXVII, 856, 1905.
 Pagt, Tribune Med., Paris, 1905, N. S., XXXVII, p. 406.
 Sollier, Presse Med., Paris, 1905, p. 716.
 Sergi, Arch. d. farmacol. spei, Siena, 1906, v. 684.
 Bongier (?) J. de Med. Int., Paris, 1906, X 300.
 Duheim, Progress Med., Paris, 1907, 3s, XXIII, 113-117.
 Duheim, Med. Press and Circular, n. s. XCL, p. 196.
 Fauntleroy, N. Y. M. J., Vol. XXXVI, p. 930.
 Brooks and Mixwell, N. Y. State J. M., Vol. II, No. 8, p. 386.
 Phillips, J. A. M. A., Dec. 14, 1912, p. 2146.
 Abstract, J. A. M. A., Dec. 21, 1912, p. 2262, from Langer Ueber.
 Heroinausscheidung und gewöhnung, Biochem. Ztschr. XLV, p. 221, 1912.

DISCUSSION.

DR. HOLT: I am sure we are all very greatly indebted to Dr. Sellew for this valuable paper which he has brought to us. I am sure that every one of us who practices medicine runs into these cases on one occasion or another. I know I had some very early experience along this line, and I recall that I read a paper at one time deprecating the use of this drug when used as a remedy to be prescribed by the general practitioner. At that time they thought I was a little off in my conclusions but the same men that opposed my opinions at that time have since come around to the same conclusion. I have had this question put up to me before now, whether or not iron was harmful. Of course I was unable to answer the question positively, but this I can say that, if it is capable of doing any good, it is also capable of doing great harm if not rightly used—that is the case with almost any drug we may use.

Now in regard to dionine—I prescribe dionine in some cases—cases of glaucoma, or I may use it in any case of disease where we need to open up the lymph channels, and I prescribe, we will say, that it be used in a five per cent or it may be a two per cent solution, and in some cases where its use did not produce the sought for results, I have had to discontinue it. But even at that strength a good many might want to continue its use. They get some results from it perhaps, as a certain amount passes down the canal and is absorbed and they get the general effect in the system. For this reason I am sure that by its too frequent use we are liable to run into habits of prescribing dionine, and the patient is likely to get into the habit of using it. For this reason, I think it wise to be very careful how we prescribe it, even for the eyes.

Vaccination Once More Vindicated.

We wish to call attention, publicly, to the fact that out of twelve patients suffering from a small epidemic of small pox in Portland, in July, 1913, not a single one had ever been vaccinated.

A MEDICAL PILGRIMAGE TO TWO ANCIENT AND EXTINCT MEDICAL SCHOOLS, CASTLETON, VT. AND FAIRFIELD, N. Y.

JAMES A. SPALDING, PORTLAND, ME.

A vacation without an aim amounts to nothing. Idleness even for a day does not become any living man, for life is too short for all that we might accomplish.

On the 4th of September, 1913, I closed my office, and set off on a motor tour with the intention of visiting Castleton and Fairfield, two medical schools, once famous but now deserted, owing to the lack of clinical material. We made our way to Portsmouth and stopped to see medical friends. On the next day we motored through Epping and Concord, and from there to Claremont by way of Sunapee Lake. At Claremont, we were advised to try for Cavendish via Amsden, but future travelers into Vermont are hereby advised that Amsden Hill is something to beat for steepness. Going down, you may plunge into dangerous gulleys. The route through Woodstock is much more promising. We reached Rutland and found it a charming town. After trying in vain to discover the medical men of fame, we kept on to Castleton which offers itself to view as a very attractive village, with one long, well shaded street. The medical school building, with a belfry and clock tower, is still standing. It is made of wood, two stories in height, with a wing for a dissecting room. The school is somewhat dwarfed in appearance by standing close alongside the large, elongated normal school, but its interior, with lecture rooms above and below, would accommodate one hundred students. Here lectured some famous men: Dr. John Putman Batchelder, on Anatomy and Surgery; Dr. William Tully on Botany and Natural History; and Dr. Selah Gridley on the Theory and Practice of Phisik.

Dr. Batchelder flourished about 1810 to 1830, and was a very skilful and erudite man, incessantly reading books on medicine and surgery as a preparation for his lectures, and putting the facts into a system of shorthand devised by himself. This worked well for a while, but he finally forgot the key to his own system and his innumerable note books amounted to nothing. He was interested in the Eye, Ear and Larynx, and had models made in New York for his lectures on these organs, as old letters of his in my possession show. Dr. Batchelder was a member of the Convention to form the National Pharmacopœia in 1819, and did good service in that laborious compilation. He wrote some clever papers, one of which on "The Heart," and another "On Fracture" being remarkably clear in their way of setting forth the subjects involved.

Dr. William Tully who had studied with Nathan Smith at Dartmouth and at Yale, wrote ponderous tomes on Botany and Materia Medica, works of great value in the days when physicians compounded their own medicines, and did a great deal more good with them as personally delivered, than modern physicians do with a piece of paper to be handed to the apothecary. Dr. Tully invented a fever powder, which had great vogue, and besides writing a prize essay "On Sanguinaria," he was very much the fashion as orator to graduating classes at various medical schools for years. Poor man, he died very old and very poor, as I have heard, but which might not have been the case had he only thought to patent his fever powders, and spent his money in advertising them properly.

The greatest man on the Castleton staff was Dr. Gridley, who practiced at Castleton and had so many students under his charge that he conceived the idea of getting them out of his office by setting up the medical school, over which he presided for several years. He might have rounded out his life there, had it not been for a fatal accident to a friend of his. Dr. Gridley, it seems, had decided to put on an addition to his house and office, and whilst the work was underway, he invited this friend to inspect it. The young man was so unfortunate as to stumble into the newly excavated cellar, to dislocate a cervical vertebra, and to die, in spite of all that Dr. Gridley and the others could do for him. This sad occurrence so affected Dr. Gridley, that he mourned over it steadily, never lived in the house when completed (though often looking in at the front door) fell into melancholia, left Castleton in grief, and died in Exeter, New Hampshire.

Castleton died a natural death when the medical school at Albany, with plenty of clinical material, was founded.

After a last glimpse at the old building, we motored along toward Saratoga, the roads improving steadily, but as the weather was threatening, we lodged over night at the quaint old "Fairvale Inn," built in 1789. It is a good place to stop over, but I did not like the looks of the well for drinking water only fifteen feet from cow barns on three different sides. Inquiry, however, failed to discover any cases of fever likely to be due to water so exposed.

Saratoga we found dusty, dirty, filled with flies, and dead as to visitors. The thought that the life-giving springs of which we had heard so much should be encased in metal tubes, through which their waters were pumped and sold in paper tumblers at five cents apiece diluted forever to us, their asserted pharmaceutical value. The lunch which we had at a fashionable hotel, surrounded by innumerable flies and over-obsequious waiters, cost more than any meal that we ever

paid for in our lives and caused me to say to myself: "Saratoga! Here we beat the British, and now the Saratogians beat us."

The road from Saratoga onward is excellent, and there are plenty of guide boards. If you are bound for Amsterdam and Fonda, it would be wise to go around by way of Schenectady, because just before reaching Amsterdam there is a very dangerous descent. We avoided it on our return. Only powerful cars could climb it. Fonda, where we stopped over night, is noisy with innumerable railway trains, but fortunately the whistle is rarely used. The hotel had many flies, but the Italian waiter kept them well out of our way, after we had given him to understand in his own language, that flies and food were incompatibles in a doctor's vacation.

On the following day, we reached Little Falls, and from there branched off to Fairfield, and as we climbed the hill, the views over the Mohawk valley were superb. But when we at last reached Fairfield, we were, as Pepys would say, "Mighty disappointed," for the settlement is a mere cross roads, with an inn, a shop, a few houses and three dilapidated medical school buildings. One of them was of wood, the old academy building, the other two of stone, seventy-five feet long, forty deep and three stories high. Old engravings of 1860 show two other buildings which have since disappeared.

In this mere cross roads there were assembled, winter after winter for many years, no less than 250 academical students, and often as many medical students. The academy was founded in 1801. Medical lectures were begun by Dr. Lyman Spalding, the originator of the United States Pharmacopœia in 1810, and continued until 1839 under other instructors, amongst whom may be mentioned the first, Dr. George Cheyne Shattuck of Boston, Dr. Theodore Romeyne Beck, Dr. Reuben Dimond Mussey, and Dr. Frank Hastings Hamilton, all of national fame.

After resigning his chemical lectureship at Dartmouth in 1799, Dr. Spalding practiced in Portsmouth, New Hampshire until 1813, when he removed to New York City and continued there successfully until an accident in 1821, when he retired to Portsmouth and died there.

Dr. Shattuck was a very celebrated practitioner in Boston, and carried off the Boylston prize for medical essays, more often than any other man since its foundation. In Boston medicine, he was exceedingly versatile and imposing.

Dr. Beck stands forth as the author of the first American text book on Medical Jurisprudence.

Dr. Dimond Mussey was a great surgeon, bold and fearless. He was the first to ligate both carotids and did it successfully in a case of nœvus of the scalp.

Dr. Hamilton remains to this day a name with which to conjure, for he wrote a remarkable book on fractures.

Under the guidance of such men as these, Fairfield flourished, with occasional relapses, owing to small endowments, until 1839, when the schools at Geneva and Albany were established with better clinical facilities. The largest medical class ever attending was one of 253; the largest number of graduates at one commencement was 55. The academy continued until 1860, and in the village we met the venerable Judge Hall, its last instructor.

As we looked about at the neglected buildings, partly roofless, mostly with broken panes of glass, and as we furthermore considered the tiny settlement which surrounded them, we could but wonder how any medical school could have existed on the summit of that lonely hill, to say nothing of ever flourishing there. But it was the men of that era who made the school famous. Famous it was, too, as it proved that for years it attracted more students than the medical schools of even the City of New York.

On leaving Fairfield, I took off my hat to the memory of those excellent physicians who braved bad roads, long distances and stormy winters and so courageously advanced the science of medicine beyond the Hudson River, a century ago.

We returned from Fairfield to Little Falls, where there is a most excellent hotel, thence to Albany, the city of up and down hill. From there through the Berkshire country, we reached Boston, and so to the White Mountains, thence to Rockland, Maine, and from there straight home, carrying out our plan for an enjoyable vacation.

Open Air Schools for Tuberculous Children.

To those who are interested in this burning public question, and there are many in every town and city in the nation, we most heartily recommend a paper on this subject with most excellent illustrations and suggestions in the *New York Medical Record* for November 15, 1913. The author is Mr. John V. Van Pelt, a skilled architect. In the paper which he read before the Fourth International Congress for School Hygiene at Buffalo, last August, he has given many directions of great value for a permanent school of this sort to be built of cement, and so planned from the beginning that various wings can be added from time to time as demanded. We commend the paper most heartily to all who believe that it is time that some place in Maine made a beginning in this method of teaching cure and prevention.

Necrology.

WALTER JOHNSON PENNELL.

Dr. Walter Johnson Pennell, a member of this Association and lately President of the Maine Eye and Ear Association, died suddenly from a stroke of apoplexy, October 29, 1913. He came down to his breakfast that morning early, soon complained of feeling poorly, developed shortly a left sided hemiplegia, became unconscious and died that evening. He had lately returned from a vacation in the woods, and it was thought that he had made too much labor out of what should have been a vacation, and absolute rest from work. A brief study of his active career, however, shows that he died from overwork, tried to do too much, saw too many patients, and labored too hard in order to be known as the leading eye, ear, nose and throat surgeon in Maine.

Dr. Pennell was born October 2, 1863, in Gray, the son of Jeremiah Pennell and Elizabeth Doughty, was educated in the common schools there, and then at the Greely Institute in Cumberland, the Nichols Latin School in Lewiston, and finally in Bates, where he attended through the Freshman year. He then found his funds growing low, and taught several terms, and at the same time studied medicine. He attended a course of lectures at the Medical School of Maine and in 1891 obtained his doctorate at the Medical School of the University of Vermont. He then took a post graduate course on the eye, ear, nose and throat in New York, and at the end of that year settled in Auburn. He married, November 29, 1891, Miss Lelia Florence Goff of Gray, who with two children now survive him. Dr. Pennell became a member of the county, State and American Medical, as well as of two local medical societies, before which he seems to have read very few papers. One of these was "On Coughs and their Treatment," and another on "Hemorrhages from the upper air passages."

He visited the chief European hospitals in 1905, and then began to work as hard as ever.

Dr. Pennell belonged, apparently, to the average run of specialists in small cities; as a physician having some moderate practice and operating occasionally. Yet a study of his life shows that in so small a centre as the combined cities of Auburn and Lewiston, he had an enormous practice. By his magnetism, his powers of per-

suasion, his genial manners and constant smile, he swept together a great number of patients, of all sorts, in his lines of practices, did numberless operations for cataract, mastoiditis, and on the nose and throat. He also obtained an extended clientage in refraction. I am assured on the highest authority that in the last ten months of his life he fitted lenses to nineteen hundred patients, and that he also saw fully fifty patients a day, week in and week out, including Sundays. How he managed such a herculean labor passes the comprehension of those who labor an hour at least on their every refractive case, to say nothing of the time lost in getting their patients out of the office.

As a result of this sort of overwhelming mental and bodily work, Dr. Pennell in the last years of his life made a good deal of money but he paid for his incessant devotion to his patients by his life, which, as we count it, was cut short by twenty years for he was a few days over fifty years only when he fell by the wayside forever.

J. A. S.

The New Method of Anaesthesia as Suggested by Gwathmey.

A very interesting editorial in the N. Y. Medical Journal of November 10, on an important advance in anaesthesia deserves careful reading at the hands of our practitioners in Maine. Briefly described, it consists in emptying the bowels and injecting five grains of cholore-tone, two drachms of sulphuric ether, and two drachms of olive oil. Hypodermatically from an eighth to a sixth of a grain of morphia and one one-hundredth of a grain of atropine are given half an hour before the proposed operation. Then by gravity a seventy-five per cent solution of sulphuric ether in olive oil is passed through a small tube into the rectum. One ounce of this mixture is introduced for each twenty pounds in weight of the patient. Each ounce should take one minute for introduction. Narcosis is generally complete, in five minutes after the last injection. If stertor occurs, the solution is drawn off by the same tube through which it was introduced and which, by the way, remains in position throughout the operation. Furthermore, after this withdrawal of the solution, if needed, the rectum should be washed out with cold water and soap suds. Few operations have so far been done under this new anaesthesia but it has advantages worth experimentation in all of our hospitals.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Editorial Comment.

Augusta State Hospital.

The recent action of the governor and the council emphasizes again the part politics play in our State institutions. It is sad but true and calls to mind a conversation held in an adjoining State with an assistant superintendent, who was advised by his superior to apply for this position. On looking over the field, he came to the conclusion that he could not work in harmony with the various antagonistic factions.

It is a well established fact that no human being is perfect but liable to mistakes, even in purely personal problems. The question naturally arises, how can we expect any human being to conduct such an institution without opportunity for criticism? It is as manifestly impossible as it would be to find one who could conduct a public service corporation or even a private enterprise in such a manner as to allow of no criticism. The laws of conditions governing human beings make it far harder to do constructive than destructive work. Thoughtless and unjust criticism are the most formidable weapons of the latter, while commendation serves as a valuable stimulus to the former. Any individual who, failing to recognize the above well known facts, carries on a mud-slinging campaign such as we have just witnessed, deserves to have his private business and political life investigated in order to determine his fitness for appearing in public affairs and furthermore, the same publicity given to the results of such an investigation as to the one just closed. Doubtless the old adage, "People living in glass houses should not throw stones" would be applicable.

Those of us who knew Dr. Sanborn recognized his ability as a physician and superintendent during his long administration. His pleasant adaptability to all conditions and a desire to make the heads of each department assume full responsibility opened the door to the over zealous to abuse his trust and there can be no question in the minds of those familiar with conditions from the time of his lamented death to a few months ago, that the treasurer was assuming part of the duties of the superintendent and running his department independent of him.

His successor came to us from an institution where the superintendent was in entire charge and responsible to the State for his administration. In his endeavor to perform his duties as he saw them, he was continually handicapped and made responsible for work done by others. This state of affairs finally terminated in a hearing before the governor and council which resulted in the resignation of the treasurer.

We now come to the final act and we find that the man who has fought for a right principle, even at a sacrifice of his position and reputation, has been asked to resign and furthermore, one of the oldest and most beloved members of our profession has been asked to resign from the Board of Trustees. It is true that the entire Board are treated likewise but our only interpretation of the act is to the effect that the politician must be respected even in our public institutions. Its ultimate effect will retard activities toward bettering conditions in all institutions where politics play any part. In other words, a superintendent is not responsible to the State but must cater to the petty politician for his position. This is truly a sad state of affairs and it is high time that the State Association took a hand in matters of this kind.

Dr. Miller's efforts to place our institution abreast of the times has been met with steady opposition from those political forces who saw just so many political jobs for their constituents to graft from and had no concern for the welfare of the institution or the inmates. Dr. Gordon, on the other hand, was eminently fitted to serve on this or any other Board governing medical institutions through long medical and surgical practice and large association with lay and medical men. He has been identified with large business interests and his wealth of knowledge was of greatest service to the institution. Now comes his announcement that he will resign this and similar positions of trust in like institutions. Knowing as we do that he has given most liberally of his time and lent financial support to any worthy enterprise for the betterment of human mankind, we can readily understand his position.

There are some 1,200 physicians in the State of Maine, serving about 800,000 people, of whom about 190,000 are legalized voters. A true physician not only seeks to improve the physical and mental welfare of his patients but is a councilor in all matters pertaining to the improvement of general conditions for mankind. He can be one of the strongest factors for good and make his influence so felt that the petty politician will be relegated to past history. During the past few years a reaction from the domineering form of political activity has swept the country and whether right or wrong, has resulted from such episodes as the one just closed.

An Example for Every Hospital in Maine.

We find on the editorial table of the Journal a delightful book of some four hundred pages, handsomely illustrated and filled with inspiring medical papers by the members of the staff of the Episcopal Hospital of Philadelphia. On opening this book for a critical examination, we find that it owes its origin to the liberality of the managers of the hospital, and by correspondence we learn that it cost about five hundred dollars to print. In it we find a general plan of the buildings and half tones of the wards, operating room and laboratories. The history of the hospital is then presented, and afterward several tables with statistics of medical, surgical, and eye, ear, nose and throat patients and operations. From these, we glean that 1,500 surgical, 150 ophthalmic and 750 ear, nose and throat operations were performed in the current year. We furthermore discover that over 2,000 X-Ray exposures were made for diagnostic purposes and about 750 skiagrams developed. Scattered throughout the book are excellent half tones of gall stones, ulcerations of the stomach, suturing in operations for hernia, carbolic gangrene of the fingers, hat pin in the bladder, fractures and apparatus for fractures, fields of vision, and the various stages of the actual operations for adenoids and tonsilectomy.

Amongst the many capable papers which the volume contains, we mention, briefly, those on carbolic gangrene; tetanus; 52 fractures of the fore-arm; fractures of the patella; extra-uterine pregnancy, appendicectomy; eye diseases in Manila; and an historical paper on Edward Jenner. In a word, the entire volume throws abundant light on what the Episcopal hospital has done for humanity under the guidance of its staff in the year just passed.

Such a book as this gives more idea of what a hospital accomplishes in a year, than a dozen annual reports as at present issued in Maine. From these, we get statistics only, from that of the Episcopal

hospital, we learn the vast benefits which a hospital confers upon the inhabitants of a given district. We see also how such a report advances medicine. For the student and the practitioner, alike, obtain useful information concerning every day cases. The details of ordinary text books are omitted and information is given plainly and succinctly.

After much investigation, we fail to find in the transactions of the Maine Medical Association many practical papers based upon the hospital service of its members. In a long residence in Maine, we do not remember that any institution, with the single exception of the Eye and Ear Infirmary in 1910, has ever issued a report with the intention of showing, in a readable shape, the actual work that it has done for the community. The only other instance in which hospitals have been utilized to furnish material for educational purposes was when the late Dr. Charles Oliver Hunt read before the Portland Clinical Society papers on the "Results of some Abdominal Operations" and "Results of Fractures," which he obtained by correspondence with the patients a year after they had left the Maine General.

We believe that a committee from each hospital in Maine should meet and discuss the question of issuing educational reports based on medical and surgical results to be obtained a year or more after the discharge of patients. We suggest that it is time for the various members of the staff to make plain to the people the work which they accomplish year after year.

Five hospitals, for instance, might combine and set apart under the charge of the president of the Maine Medical Association, a sum of \$100 each, and see what could be done. We believe that a presentation of the good work done by the hospitals would obtain for them more money from the State and from charitable persons than they now obtain. We believe, also, that the hospitals should combine with a view to obtaining greater freedom in the making of post mortem examinations than now prevails. It would in our opinion be a distinct advantage to the State, to give a free opportunity to examine every person dying within the hospitals. For in that way, a better knowledge of diseases and of the results of operations would be obtained. It is daily thrown at us that we make mistakes in diagnosis, treatment and operations. If the State will give us absolute right to examine the cause of every death in a hospital, we shall soon learn to make more accurate diagnosis, to use medicine more intelligently, and to operate more skilfully.

To other advances imperative upon our hospitals in preventing waste, and in obtaining greater knowledge on the part of the staff, we shall return in a second paper and offer a precise remedy, and a clear road.

Conservation of Vision.

At a recent meeting of the Ophthalmological and Oto-Laryngological section of the Maine Medical Association, a communication was read by Dr. Bowers of Portland, in which Dr. Allport of Chicago requested that the section make some beginning toward public lectures on the "Conservation of Vision" as suggested by a committee appointed for the purpose at the late meeting of the Clinical Congress of Surgeons of America and endorsed by the A. M. A. After the reading of the committee's letter, it was voted that a committee of one be appointed to make inquiries concerning, and arrangements for, the proposed lectures which seemed worthy of being carried out. Dr. Spalding of Portland was appointed and after corresponding with Dr. Allport and Hon. Payson Smith, State Superintendent of Public Schools, he informs us that a first lecture in this direction has been arranged for and will be given by Dr. J. W. Mitchell of Houlton at the Aroostook County teachers' meeting, to be held the last week of January, 1914. Others will follow, one for each county in Maine during the year. It is also hoped that the State grange will co-operate with the national and State committees, granting permission to devote a part of their meetings to speakers on the subject, so that the people of the State will have abundant opportunities to hear half-hour lectures on this important topic. The idea is to talk on the care and use of the eyes, proper illumination of homes and public buildings, ophthalmia neonatorum, trachoma, eye strain, wood alcohol blindness, and allied topics.

Trephining for Glaucoma.

Eye surgeons throughout the civilized world are intensely interested in the subject of trephining the eye in simple, acute and chronic glaucoma. Nothing equal to the present interest has occurred in ophthalmology since the discovery of iridectomy as a cure for glaucoma, by V. Graefe, sixty years ago, or that of the locally anæsthetic properties of cocain by Koller some twenty years ago. This operation has gone so far as to win for itself a prominent place in the medical literature of today. To "Do an Elliott," means to trephine the eye in a case of that dreaded disease, glaucoma, or hardening of the eyeball.

Much as we detest the use of slang in medicine and surgery, and yet valuable as it seems in expressing in brief, what might demand many words for exactitude, yet we must regret exceedingly in this particular instance, that ophthalmic surgeons should in so short a time as five years have completely forgotten that the first paper read and

published on "Trephining in Glaucoma," was from the pen of Mr. Freeland Fergus, an ophthalmic surgeon of Great Britain. Long then, let the name of Fergus be praised, if trephining, his original suggestion, becomes a permanently valuable operation in glaucoma. To Fergus, then, the credit for the original idea, just as to Graefe for iridectomy, and to Koller for cocain. Trephining has now been enormously cultivated in India, where the surgeons of the Medical Service have an immense supply of patients, such as neither Europe nor America alone or combined can ever expect to equal. Owing to this cause, operations for capsular extraction, and for glaucoma have been so highly developed there that ophthalmic pilgrimages to India are now considered an important factor in the training of the modern ophthalmologist.

When you can there see in a single hour, twenty cataract operations, the same number of trephinings for glaucoma, then the long journey seems well worth the time and the expense. But, on the return, comes the sad reaction, for glaucoma is with us so rare a disease, comparatively speaking, that what one has seen in India in a day he might never witness in an entire life time of ophthalmic practice at home.

The operation of trephining of the sclera as originated by Fergus, modified by others, and cultivated into a specialty in India, consists, essentially, in making, as it were, an apron of conjunctiva above the cornea so that when dissected off carefully it falls down over that tissue. In this way, the sclera is exposed to view at the junction of the ciliary region, the root of the iris, and the margin of the anterior chamber. Into that district a trephine of from 1 to 3 mm in diameter is set, and slowly revolved until a disc is removed from the sclera and cornea. If iris prolapses through the circular opening, it is abscised. Then the apron of conjunctiva is sutured into its original position, and the essence of the trephining is complete, in the shape of a filtration cicatrix. By such permanent filtration, glaucoma is permanently relieved. The iridectomy operation for glaucoma consisted in obtaining a linear incision, in the hope that the overlying conjunctiva would produce a filtration cicatrix. The new idea is to make a circular orifice, and intentionally to produce a filtration cicatrix by the conjunctiva forming, as it were, a valvular covering to a circular opening which cannot heal over so thoroughly as one that is linear.

The accidents of trephining are that the disc may fall into the anterior chamber, but if so, let it alone; that iritis may ensue, but if so, treat it like other forms of iritis; that the lens may be injured, but if so, the operator is no more at fault than in iridectomy, and, that late infection may ensue; but if so, it is due to the lack of proper asepsis in the performance of the operation.

The results of trephining seem so far to be promising. Yet, a few eyes have, after the operation, been examined pathologically, and the circular opening found so densely filled with connective tissue formation that filtration would have been impossible.

A trephine driven by electricity is the latest novelty for the operation. With the motion cared for independently of the operator, he can devote his whole attention to avoiding any possible injury to the eyeball, or its contents, by too great pressure with his hand.

Some authorities call trephining easy, and others call it very difficult. In such a matter of doubt it is to be hoped that the active ophthalmic surgeons of today will treat their patients as they would themselves like to be treated for glaucoma in their own persons. In other words, they would choose an operator who had first tested the new operation on the cadaver, then on the eyes of animals, latterly on those of patients in institutions, and finally upon some private patients.

Strychnia Poisoning.

A remarkable instance of recovery after the ingestion of 15 grains of strychnia is recorded in the *American Journal of Medical Sciences* for October. Morphia, stomach washing through the nose (the jaws were too fixed to open) chloroform, and then ether were utilized as anæsthetics and anti-spasmodics for several hours. Enemata containing sodium bromide and chloral hydrate were also administered freely.

Mileage under the British Insurance Laws.

The Chairman of the British National Insurance Commissioners has again and again opposed any increase in mileage rates for the physicians attending patients on the Panel. Not long ago this gentleman happened to be discussing mileage rates with a physician, and asserted roundly that the amount of travel alleged was highly overrated. The doctor offered then and there to give him twenty-four hours of his time, in order to show him what a country doctor's work was like. The honorable chairman accepted and from dawn till dinner time, about 7 p. m., he had enough of travel in a motor car to convince him that there was more in it than he thought. He was then planning to go wearily to bed when the doctor was summoned to still another case of illness. This time it involved twenty miles in a motor boat on a Highland lake, and in the midst of it they were overtaken by a tempest with rain and had to work for their lives and to save the boat from swamping. When they finally reached the doctor's home in safety at one in morning, the Chairman of the Insurance Commission was perfectly ready to acknowledge that there was justification in the doctor's demands for increased mileage.

Too Much Light.

The recent occurrence of a curious inflammation of the entire uveal tract in connection also with loss of sight and profuse deposits in the vitreous from exposure to a 50 candle Tungsten burner, should warn people not to use so powerful a light without a protecting shade either to the eyes or on the light itself. In the rage for more and more illumination, we are forgetting precisely what amount the human eye can endure without danger to its functions and tissues.

A great many people forget, that all rooms should be illuminated with TWO SOURCES of light, one directly near and upon the work, the other for general illumination of the room in which the work is done. One light, only, injures the eyes, because when they are turned from use they meet with a dark contrast to the bright light which has shone upon their previous work. This should not be so, and can be prevented by illuminating the room itself.

Pulmonary Hemorrhage.

Various articles on this interesting topic continue to appear from time to time. The latest suggestion bearing upon the relief of this condition so difficult to manage and oftentimes incorrigible, is the use of emetine. And this brings us back to just where we were a century ago when a very ingenious physician of that era thought that he had obtained a permanent cure for the relief of such hemorrhages by the use of sulphate of copper and analogous substances to act in precisely the fashion as does our emetine of today. In other words, puking, produces a drastic spasm of the diaphragm with resultant, but unfortunately only a temporary stoppage of pulmonary hemorrhage. Adrenalin and pituitrin may be added to recent remedies suggested in this same condition. All are worth trying and keeping well in mind in a condition of this sort.

Yellow and Blue as Danger Signals for Railroads and Ships.

In a recent paper by Dr. F. D. Patterson in "Drugs, Oils and Paints," is a suggestion that red is a poor danger signal, and often mistaken. Even the color blind may guess at it. He believes that yellow and blue are the best signals for such purposes, because they are the most luminous, they give rise to normal color sensation as soon as visible, are permanent and fast, and color blind persons react normally to them. If adopted, color-blind-issues would cease to trouble the travelling public.

Reputable Manufacturing Pharmacists Do Not Furnish Emmenagogues for Immoral Purposes.

Recently one of the leading manufacturing pharmaceutical houses received a letter upon the letterhead of a retail druggist, but signed by another name followed by the word "druggist." The person signing the letter may have been a clerk or successor of the druggist. The letter was as follows:

"There is practically no sale for your Emmenagogue Improved Pills, as few ladies know anything about them, and we can give no advice, as we know nothing about them ourselves as to dose, etc. Please let us know by return mail and tell us how to use, dose, etc."

Reply was made to the pharmacist whose name was on the letterhead, and was as follows:

"We have our doubts about Mr. ———— being a druggist, for we cannot imagine any druggist not knowing that it is not only immoral, but criminal, to sell an emmenagogue except upon a physician's prescription. We believe that every druggist who sells an emmenagogue direct to the consumer is put upon his notice that it will be used for an immoral and criminal purpose. Emmenagogues on our list are intended exclusively for the prescription trade and we never knowingly sell them for popular use or to be recommended and resold as remedies for female complaints, etc."

New and Non-official Remedies.

Since publication of *New and Non-official Remedies*, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Non-official Remedies."

Agglutinating Sera for Diagnostic Purposes.—These are the serum of animals (horses) immunized against various bacteria. For use a solution is added to a suspension of the bacterium to be tested, and after incubation for a certain period the mixture is examined.

Agglutinating Serum for the Identification of Bacillus Paratyphosus A. Agglutinating serum for the identification of bacillus paratyphosus B. Agglutinating serum for the identification of bacillus typhosus. (Jour. A. M. A., Nov. 1, 1913). Intended for use by the microscopic method. H. K. Mulford Co., Phila., Pa.

Silk Peptone "Hoechst."—Peptone made from silk and standardized to a uniform rotatory power. It is used for the detection of

peptolytic ferments, either by changes in optical activity or by the precipitation of tyrosin produced by its digeston. Farbwerke Hoechst Co., New York. (Jour. A. M. A., Nov. 15, 1913.)

Antistreptococic Vaccine (Scarlatina Prophylactic) Strepto-Bacterin (Scarletina Bacterin) Polyvalent. Acne Bacterin Polyvalent. Coli-Bacterin Polyvalent. Friedlander Bacterin Polyvalent. Gonococcus-Bacterin Polyvalent. Pneumo-Bacterin Polyvalent. Staphylo-Acne-Bacterin Polyvalent. Stahylo-Albus-Bacterin Polyvalent. Staphylo-Aureus-Bacterin Polyvalent. Staphylo-Bacterins (Human) Albus-Aureus-Citreus. Strepto-Bacterin (Scarletina Bacterin) Polyvalent. Antistreptococic Vaccine (Scarletina Prophylactic). Strepto-Bacterin (Human) Polyvalent. Typho-Bacterin Polyvalent. Typhoid Prophylactic. N. N. R., 1913. Abbott Alkaloidal Co., Chicago.

Arheol. — Arheol is santaoil, the chief constituent of sandal-wood. Its action is the same as that of sandalwood oil, but it is claimed not to cause disturbances of the stomach or the kidneys. Arheol is marketed only in the form of Arheol Capsules, 0 2 Gm. Alexandre Astier, Paris, France. (Jour. A. M. A., Nov. 22, 1913.)

Hydroleine



Made from pure Norwegian cod-liver oil emulsified after a scientific formula by approved processes.

The need of many children for cod-liver oil has been met with marked success by Hydroleine. They take it willingly; they—as well as adults—like its distinctive nutty flavor. Hydroleine is also exceptionally digestible. While its scope of usefulness is widened by its palatability and digestibility, it is always notably dependable.

Sold by druggists.

THE CHARLES N. CRITTENTON CO.
115 Fulton St., New York

Sample will be sent to physicians on request.

Historical Notes.

Medical History at the International Medical Congress.

Whilst hundreds of physicians and surgeons were hurrying to and fro in London in August last to witness the latest improvements in all branches of the art of medicine, a few devoted men and women collected together to listen to various papers on the history of medicine. To these members of the Association, this section of history was the most attractive of all. The present contains only the reflex of that which is past. The section was under the charge of Dr. Norman Moore whose "Relation of Medicine to Philosophy" entitles him to high standing in all that concerns the history of our profession. Papers were read "On St. Luke, the Physician and Roman Citizen," another "On Syphilis as known in the time of Christ." "On Leprosy in the Middle Ages," "On Fistula" as described long since by Dr. John Arden () and "On the Post Mortem Examination of the body of Napoleon at St. Helena."

A very curious paper was also handed in, in which it was shown, from pictures of obstetrical forceps discovered on the walls of underground caverns dating from 150 B. C., that the honor of the discovery of these useful obstetrical instruments does not belong, as has so long been claimed, to Pater Chamberlain.

The Centennial of Iodine.

One hundred years ago, on the 29th of November, 1813, Desormes, a celebrated chemist, announced to the French institute the discovery of a new metalliod, by the pharmacist Courtois. At the following session of the institute, December 6, 1813, Gay Lussac, one of the most eminent chemists of all time christened the new metalloid with the name, IODINE, because the vapor of it when heated was blueish and the Greek word for that color was IODEES. Courtois was an experimenting pharmacist and Gay Lussac was a famous chemist who died whilst on the verge of the discovery of the telegraph and of the telephone. In experimenting with sodas and chalks, Courtois observed that his copper vessels were often perforated by some unknown substance. He succeeded in liberating it from its compound and this proved to be what we call iodine. He received a prize of 6000 francs for his discovery. Courtois also came near discovering codeia, for having isolated morphia from opium, he became convinced that this was not the only alkaloid present. Courtois died in 1838, leaving to his widow and children only a famous name, yet even now quite forgotten except by the busy historian in medicine.

County News.

CUMBERLAND.

The annual meeting of the Cumberland County Medical Society was held at the Congress Square Hotel on Friday evening, Dec. 19th. The meeting was called to order at 8 o'clock, with Dr. Holt, president, in the chair. There was in attendance 147 physicians of whom 40 were physicians from neighboring county societies.

The Board of Censors reported favorably on the names of Drs. Henry M. Swift and Clement P. Wescott, both of Portland, and they were unanimously elected to membership.

The annual report of the Secretary for 1913 was read, approved, and ordered to be placed on file.

The Cumberland County Medical Society has held in 1913, four regular meetings and one special meeting at the Congress Square Hotel. The attendance has, during the year past, been the highest since the existence of our Society. There were ninety-seven members present at our April meeting, which is the record attendance to date, even surpassing that of our annual meetings.

The membership of the Society at the beginning of the year was 140. There have been added during the year 3 new members, two by vote and one by transfer. One member has been dropped because of non-payment of dues, while one other member has been dropped by request.

It is with sorrow that we have to report the death, in June, of Dr. Ambrose H. Weeks, Chairman of our Board of Censors, one of our most active members and one of our best friends.

Papers read before the society during the year have been excellent, especially those of Dr. Leary, Dr. Bainbridge, and Dr. Holmans.

We have been particularly pleased to welcome to our meetings the physicians from the neighboring counties of York and Sagadahoc, and hope they will continue to come.

PHILIP THOMPSON, *Secretary*.

It was voted that the President appoint three members to withdraw and later present nominations for officers of the Society for the year 1914. Dr. Holt appointed as such committee, Drs. Warren, Pingree and Gilbert. The Nominating Committee presented the following list of officers, who were duly elected to membership by the secretary casting a single ballot for the Society: President, Dr. B. F. Dunn of Portland; Vice President, Dr. G. L. Sturdivant of Yarmouth; Secretary, Dr. A. P. Leighton, Jr., of Portland; Treasurer, Dr. R. B. Moore of Portland; Censor for 3 years, Dr. C. W. Foster of Portland.

Dr. Gilbert presented a communication from the Council on Pharmacy of the A. M. A., outlining a proposed two weeks' tour of the New England States by Dr. John Witherspoon, president of the A. M. A.

Dr. Gilbert made a motion that Dr. Witherspoon be invited to read a paper at our February meeting. It was voted that the matter be referred to our committee on program to make final arrangements.

After the business meeting, there was an adjournment while an appetizing banquet was enjoyed by all.

Following the banquet, Dr. Holt called the meeting to order and Dr. J. F. Thompson read the following resolution:

"Resolved that the Cumberland County Medical Society, with its guests, assembled from all parts of the State, disapprove of any action directed against Dr. Henry Miller, superintendent of the Insane Asylum at Augusta, as detrimental to the interests of the insane of our State."

Dr. Holt now introduced Dr. J. Madison Taylor of Philadelphia, who read the paper written by Dr. C. E. De M. Sajous, who was to be the speaker of the evening but had been unable to attend. The subject of the paper was "The Various Forms of Goitre and their Treatment," and there was presented some new and very interesting conclusions reached by Dr. Sajous after many years' study of the subject of the internal secretions. Especially interesting were the views of Dr. Sajous on the interrelation of the ductless glands and the effects of intestinal and other intoxications in producing pathological changes, particularly in the thyroid.

After the paper, many questions were asked and Drs. Leslie and Milliken both gave interesting accounts of their experience with different forms of goitre.

The meeting was adjourned at 10.35.

The Board of Censors now stands: Dr. E. W. Gehring, term expires 1914; Dr. Alfred Mitchell, term expires 1915; Dr. C. W. Foster, term expires 1916.

The delegates to the Maine Medical Association, elected last year for two years are: Dr. F. Y. Gilbert, Dr. F. H. Jordan, Dr. A. H. Little, Dr. C. B. Sylvester, Dr. N. M. Marshall and Dr. E. E. Holt.

P. P. THOMPSON, *Secretary*.

PORTLAND MEDICAL CLUB.

The tenth meeting of the year was held at the Columbia Hotel on Thursday evening, December 4th, 1913.

Drs. Edwin M. Northcott, Carl M. Robinson and Clement P. Wescott were elected to membership in the club.

This being the annual meeting, the following officers were elected for the ensuing year:

President, Dr. Walter D. Williamson; 1st Vice President, Dr. Alfred Mitchell, Jr.; 2nd Vice President, Dr. Frank Y. Gilbert; Sec-

retary - Treasurer, Dr. Roland B. Moore; Board of Censors, Drs. Bertrand F. Dunn, Ernest W. Files and Stanwood E. Fisher.

The club then adjourned to the dining room, where dinner was served, following which Dr. Owen Smith delivered the annual oration, his paper being on cerebral abscess following suppurative otitis media. Following this, the club was regaled with series of "Medical Anecdotes" compiled by Dr. James A. Spalding, which were the source of much amusement.

ROLAND B. MOORE, *Secretary*.

HANCOCK.

A regular meeting of the Hancock County Medical Society was held at the residence of Dr. R. W. Wakefield, Bar Harbor, Dec. 17th. The following officers were elected to serve for the ensuing year: President, Dr. E. J. Morrison of Bar Harbor; Vice President, Dr. J. H. Patten of Bar Harbor; Secretary, Dr. G. A. Neal of Southwest Harbor.

Dr. Tyson of Bangor read an interesting paper on "Dementia Præcox." Dr. Hagarthy of Bar Harbor reported a case of Hydatidiform Mole.

A very pleasant lunch was enjoyed during the social hour.

GEORGE A. NEAL, *Secretary*.

KENNEBEC.

The annual meeting of the Kennebec County Medical Association was held at the Augusta House, Tuesday evening, December 30, 1913.

The meeting was called to order shortly after six o'clock, by the President, Dr. S. J. Beach. The minutes of the last meeting were read and approved. The report of the Treasurer was presented, referred to the Auditing Committee and it was voted to accept the report. The Board of Censors reported favorably upon the names of Dr. Samuel H. Kagan of Augusta, Dr. Frank D. Walker of North Vassalboro and Dr. Doris May Presson of Augusta. These candidates were balloted upon individually and each one received unanimous votes. It was moved and seconded that the President appoint a Nominating Committee of three. The following Committee was accordingly appointed: Dr. Hardy of Waterville; Dr. Milliken of Hallowell, and Dr. Sawyer of Gardiner. The Committee presented the following candidates as officers for the following year: President, Dr. Wellington Johnson of Augusta; Vice President, Dr. R. D. Simons of Gardiner; Secretary, Dr. Henry W. Miller of Augusta; Treasurer, Dr. George R. Campbell of Augusta; Censor, Dr. A. B. Libby of South Gardiner. It was voted that the retiring president be instructed to cast one ballot for the list of officers and they were elected in due

form. The Society then adjourned to the dining room of the hotel where an excellent supper was served. After the banquet, the address of the retiring President, S. J. Beach, was presented. It contained many practical suggestions and was exceptionally well received. Dr. Cotton of Boston, who was to have read a paper on "Fractures," was unable to be present and his place was taken on very short notice by Dr. F. L. Richardson of the Boston City Hospital, who read an instructive and practical paper on "Anæsthesia." Dr. Bradford of Portland presented a paper upon "Modern Treatment of Appendicitis." Both papers were of unusual merit and a cordial vote of thanks was extended to the essayists. Thirty-four members were present.

Adjourned.

HENRY W. MILLER, *Secretary*.

KNOX.

The annual meeting of the Knox County Medical Society was held at the Thorndike hotel, Tuesday evening. After a delicious supper, the society adjourned to the parlors, where the president, Dr. B. F. Adams, delivered a very able and interesting paper on "Blood-Pressure." After the discussion of the paper, the following officers were elected to serve for the coming year:

President, Dr. B. F. Adams, Rockland; vice president, Dr. E. B. Silsby, Rockland; secretary and treasurer, Dr. H. W. Frohock, South Thomaston; board of censors, Dr. L. W. Hadley, Union, Dr. W. F. Hart, Camden, Dr. H. E. Gribben, Rockland; delegate to Maine Medical Association for two years, Dr. W. F. Hart, Camden.

Dr. O. R. Lawry of Vinalhaven, Dr. F. W. Larrabee of Warren, Dr. Nash of Jefferson, Dr. J. W. Sanborn of Waldoboro, and Dr. E. F. Stetson of Damariscotta, were admitted to membership. The society has had a very successful year.

H. W. FROHOCK, *County Editor*.

OXFORD.

The regular annual meeting of Oxford County Medical Society was held at Needham's Hotel, Mechanic Falls, on Monday, Dec. 29th. The following officers were elected for the year 1914: R. R. Tibbetts of Bethel, Me., president; F. E. Leslie, Andover, vice-president; D. M. Stewart, South Paris, secretary; A. L. Stanwood, Rumford, treasurer; and F. E. Leslie of Andover, censor for three years.

Dr. Owen Smith of Portland read an interesting and instructive paper entitled "Brain Lesions Secondary to Suppurative Otitis Media." This was followed by a discussion in which nearly every member took part and a rising vote of thanks was given Dr. Smith for his valuable paper.

D. M. STEWART, *County Editor*.

PENOBSCOT.

The December meeting of the Penobscot County Medical Association was held at the Bangor House, Friday evening, Dec. 19th, Dr. Daniel A. Robinson of Bangor, presiding.

On account of having to change the date of the meeting, the attendance was small, only eighteen members being present.

The paper of the evening was given by Dr. H. T. Clough of Bangor, the subject being: "The Business Side of Medicine."

A very pleasant time was passed, everybody having something to say on a topic so interesting to all.

J. B. THOMPSON, *County Editor.*

WASHINGTON.

The accompanying letter was written in response to a communication from the Editorial Staff. Washington County has a real live organization and the suggestions embodied in this letter are well worth consideration.

Calais, Me., Dec. 24, 1913.

Dear Doctor:—Your letter of the 23rd at hand, and regret that I have no case reports for you. Members are, as a rule, general practitioners, with little leisure for the composition of formal papers or written case reports. In view of this, it has been the policy of the executive of this society for the past two years, to eliminate so far as possible the "paper" feature, carrying it to addresses by visitors or brief essays, illustrations of particular subjects and to substitute the presentation of clinical cases and case reports with *verbal* histories, microscopic demonstrations, specimens, skiagrams, demonstration of instruments and appliances, with the patients for examination, or to show results of treatment, and above all, in every way to promote free discussion, and exchange of opinion. It has also been made a strong point that all regular business should be disposed of with the utmost promptness. The meetings are well attended, an average for the past two years of 50 per cent of the membership, which now embraces 75 per cent of the physicians of the county.

The meetings are always *alive*, though the programs are not always as full as the last, a brief resume of which is appended.

The physicians of Calais and St. Stephens also maintain a medical club, now about entering upon its second year of the "A. M. A. Post-graduate Study Course." The club has, during the past year, obtained speakers from clinical centers. The "social side" is not neglected.

PROGRAM, DEC. 11, 1913.

An address upon "X-Ray and the Treatment of Fractures."

A case of Hodgkins disease with the patient, and microscopic slides of the blood and sections of the enlarged glands.

A case of aneurism of the thoracic aorta, with the patient, and skiagraphs of the lesion.

A case report, illustration of the segulae of gonorrheal infection.

A short paper upon "Fractures of the Vault with reference to Pathology and Diagnosis" with two patients illustration.

Two cases of fracture of the skull, with patients showing results of treatment.

The above, with the regular business of an annual meeting, filled out the entire time allotted without any idle moments.

Very truly yours,

H. B. MASON, *County Secretary*.

YORK.

The next quarterly session of the York County Medical Society will be held in the city building, Biddeford, Wednesday, January 7th. This will be the annual meeting for the election of officers. Several applications for membership will be voted upon, and the reports for the year 1913 will be presented.

The meeting will be called at 10 o'clock a. m., and dinner will be served at Hotel Thatcher at one o'clock. Several important matters will come before the meeting. Dr. Wm. L. Cousins of Saint Barnabas Hospital, Portland, will be a guest of the society and will give an address.

A. L. JONES, *County Editor*.

York County takes the lead in organization work in that it has perfected an organization of doctors' wives. The majority of the counties have ladies' day, but this is the first one to have a ladies' separate organization. The officers are as follows:

President, Mrs. E. C. Cook of York; First Vice President, Mrs. C. E. Thompson of Saco; Second Vice President, Mrs. A. S. Davis of Maplewood; Secretary, Mrs. R. L. Maybury of Saco; Treasurer, Mrs. S. W. Smith of York; Lookout Committee, Mrs. A. L. Jones of Old Orchard, Mrs. H. L. Prescott of Kennebunk; Mrs. R. S. Gove of Sanford.

Entertainment Committee, to serve at next meeting — Mrs. A. C. Maynard of Biddeford; Mrs. C. E. Lander of Alfred; Mrs. John W. Gordon of Ogunquit.

Refreshment Committee to serve one year — Mrs. J. D. Cochrane of Saco; Mrs. C. F. Kendall of Biddeford; Mrs. H. Willis Hurd of Biddeford.

Committee to Revise By-Laws presented today was appointed consisting of Mrs. D. O. Dolloff of Biddeford; Mrs. L. L. Powell of Saco; Mrs. R. L. Maybury of Saco.

The Nominating Committee was — Mrs. F. C. Lord of Kennebunk; Mrs. D. E. Dolloff of Biddeford; Mrs. A. C. Maynard of Biddeford.

Book Reviews.

Review of Eggleston's Prescription Writing.

By Cary Eggleston, M. D. W. B. Saunders, Publisher.

This small volume covers the subject matter of prescription writing in a pleasing and authoritative manner and is suited alike to the needs of the student, taking up the matter for the first time, and to the busy practitioner who wishes to refresh his memory on the various subjects including Latin construction, signs and symbols, incompatibilities, vehicles, colorings, metric system, estimation of dosage, etc.

The tendency to prescribe ready made formulas and proprietaries has been encouraged in so many ways by clever combinations and lauded virtues that those who do not wish to be shackled absolutely by this form of prescribing, may read this volume with profit.

H. E. M.

Review of Mental Diseases.

Clinical Manual, by Dr. F. X. Dercun, Philadelphia, Professor of Mental and Nervous Diseases of Jefferson Medical College. W. B. Saunders, Publisher.

Dr. Dercun says this book has been written in response to an urgent demand for the use of the practitioner. There is some originality in the method of classification and in the manner in which many of the various types of mental troubles are presented.

The author believes that there will be more progress in our knowledge of diseases of the mind and nervous system, and that our advance will be along the lines of internal medicine, and in clinical psychiatry. The treatment of medicine is in a separate part of the book, which is a commendable departure.

There is really very little that is new in this volume, and as a matter of fact, there has been very little new in our knowledge of morbid psychology for many years past. We hear much about new methods of treatment but there are no very startling results that have been published as yet.

Dr. Dercun states that under treatment today there are many cases of neurasthenia with depression and motion or disturbance, that should be treated at home rather than in an asylum or hospital. This must depend on many things however, and, as the general rule applying in most cases, is not, I think, in accord with the consensus of opinion of medical men in general. An absolute change of surroundings is very often the most important step, and, in surroundings that are so arranged as to be applicable to this morbid state, we find the most powerful form of suggestion, and perhaps the most valuable remedy at our command in very many cases.

P. H. S. VAUGHN.

Personal News and Notes.

Dr. C. E. Sylvester of Harrison is on his annual vacation and is visiting the hospitals of New York, Philadelphia, Baltimore and Washington.

Dr. W. C. Peters, president of the Maine Medical Association, was a guest of the last meeting of the Cumberland County Medical Society.

Dr. A. G. Wiley of Bar Mills has been seriously ill during the past few months, and several weeks ago he went to Bethel, in Oxford county, his native town, for a prolonged stay, in order to regain his health. Dr. Wiley succeeded the late Dr. Ambrose H. Weeks of Portland in Bar Mills and has had an extensive and hard country practice.

We are very glad to note that Dr. Thomas Conneen of Portland has recovered from his recent prolonged illness.

Dr. John E. Gray of Portland, who has been confined to the house for the past few weeks, will soon be able to take up his work again.

Ambrose Herbert Weeks, friend, physician, man. As a friend he was loyal and sincere; as a physician, sympathetic yet firm, considerate, never hasty in judgment, thoroughly conscientious; as a man, dignified, faithful, with charity for all and malice toward none.

A genial, kindly, strong spirit, whom to know was to love. In testimony of this abiding impression, this memorial is offered by the Cumberland County Medical Society.

ALFRED MITCHELL, JR.

E. W. GEHRING.

Dr. W. E. Rice of Bath passed away at his home Wednesday, December 17, 1913. He was 67 years and 7 months old.

Propaganda for Reform.

The Friedmann Cure.—After studying the cases inoculated by Dr. Friedmann at Montreal, Ottawa, Toronto and London, Ontario, a committee of the Canadian Association for the prevention of tuberculosis has reported unfavorably on the treatment. (Jour. A. M. A., Nov. 1, 1913, p. 1648.)

Baughn's Pellagra Remedy.—A booklet issued for Baughn's Pellagra Remedy, American Compounding Co., Jasper, Alabama, sug-

gests symptoms of all kinds as an indication of pellagra. If you have any of these, the inference is that the "grim spectre" pellagra, has you in its grasp! Horror is piled on horror in the most approved "patent medicine style," reaching as a grand climax a description of "the last stages" and closing with the peroration: "And the last stage, till now — **the mad house and death.**" As the exploitation of this nostrum interfered with the attempts of health officers to eradicate pellagra in Alabama, it was analyzed in the A. M. A. chemical laboratory. The nostrum comes in two forms, capsules and a powder for external use. The capsules were found to contain charcoal, basic iron sulphate and a little quinine. The powder was composed of common salt and basic iron sulphate. (Jour. A. M. A., Nov. 15, 1913, p. 1828.)

Waterbury's Compound. — Waterbury's Compound — called Waterbury's Metabolized Cod-Liver Oil Compound until the A. M. A. chemical laboratory showed it contained practically no cod-liver oil — was one of the proprietary preparations advertised both in "display" form and also in the form of an "original article," in the *Army and Navy Medical Record* — a fraudulent publication that offered its editorial pages for sale. Physicians are now receiving from the Waterbury Chemical Company, a reprint of what purports to be an editorial from the *Army and Navy Medical Record* entitled, "One of America's Most Valuable Preparations." The preparation, of course, is "Waterbury's Compound." (Jour. A. M. A., Nov. 15, 1913, p. 1830.)

Sensitized Virus-Vaccine. — Besredka asserts that the injection of living germs sensitized in certain ways, produces a more substantial immunity and greater production of antibodies than the injection of germs killed by heat or in other ways. In apes, sensitized typhoid bacilli gave absolute protection, causing no fever and no reaction, while killed bacilli failed to protect adequately. As a result of these experiments a number of "sensitized virus-vaccines" have been prepared and the antirabic vaccine used in France is now a sensitized virus. Before the employment of the sensitized typhoid virus-vaccine can be considered, much evidence must be produced that there is no danger of producing typhoid carriers and that this vaccine gives any better protection than the vaccines now in use. Similar objections hold against other vaccines of this kind and at present the obstacle to the use of such living germs for protective purposes would seem to be quite impassable. (Jour. A. M. A., Nov. 15, 1913, p. 1814.)

Pulmonol. — Pulmonol is a consumption "cure" put out by the Pulmonol Chemical Co., New York. As always in the case of consumption "cures," the testimonials issued may be divided into two classes, those who really had tuberculosis and those who did not have it. Investigation of some of the testimonials given some time ago, generally show that those who relied on the nostrum are dead, while those who got well never had tuberculosis. Examination in the A. M. A. chemical laboratory indicated that each fluid ounce of pulmonol was approximately equivalent to 29 gr. of potassium guaiacol sulphate, 10 gr. of sodium benzoate and 1-24 gr. of strychnine sulphate. (Jour. A. M. A., Nov. 29, 1913, p. 1998.)

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

FEB., 1914.

No. 7

ECTOPIC GESTATION; THE SYMPTOM-COMPLEX OF ITS EARLY STAGES.*

BY W. BEAN MOULTON, M. D., PORTLAND, ME.

The general subject of extrauterine pregnancy is so complex, and withal so interesting in its various aspects, that I do not intend to touch upon anything but a few points and to especially lay emphasis on the existence of a definite symptom-complex for its early diagnosis, which if carefully looked for is second only in its reliability to that in acute appendicitis, and the analogy in our concepts between these two maladies is so striking that I shall often in the course of this paper draw attention to it.

That impregnation and the subsequent development of the fœtus could take place outside the uterine cavity has been known from the earliest times, from the discovery of lithopædia and abdominal attachments of the placenta in various positions in the course of post mortem examinations. The speculations and controversies as to the origin of these monstrosities was of great interest to the old pathologists, but from the side of clinical medicine are of no value. The fact that every pregnancy begins as an extra-uterine settled their origin and life history. What we today are interested in is the prevention of their formation by not allowing the growth to proceed to the stage where their production is possible. They may be of interest in museum jars, together with huge ovarian cysts, large multiple myomata, etc., but they are not of interest in the bodies of our patients.

*Read before Maine Medical Association, July, 1913.

The subject is interesting to surgeons for the reason that in these days when so much in half-jest and half-earnest is being said of the number of unnecessary operations that are being performed, it is with the keenest satisfaction that he can, through a bellyful of blood, clamp the bleeding points of a too late diagnosis, and deliver the hæmorrhagic sac of a ruptured tube. Next to Cæsarian section no operation is so spectacular, so life-saving, or so deserving of praise for a task well done.

In order to explain the phenomena which take place to produce the symptom-complex, I will review briefly a few essential points of the cycle which occurs in the formation of an extrauterine pregnancy from a physiological and pathological standpoint, and to apply them to the signs elicited.

Etiology. The fundamental factor in the production of extrauterine pregnancy lies in the fact that each and every pregnancy begins as an extrauterine. That is to say the extruded ovum, free in the peritoneal cavity — for the ovary you remember of all the organs in the abdomen has no peritoneal covering — this ovum is met and fertilized by a spermatozoon which has made its active way up through the tube.

Growth of the ovum begins and coincidently it is rapidly wafted along the lumen of the tube towards the uterus by the cilia of the tubal mucus membrane. When one considers the extremely rough passage the embryo has to undergo on this journey on account of the numerous rugæ and convolutions into which the lumen of the tube is thrown, the wonder is not that there are tubal pregnancies occasionally, but that this accident is not of more frequent occurrence.

Just why it is arrested at times and not at others has been the subject of much speculation, but the concensus of opinion seems to be that this accident is caused by some one of several factors that obstruct the lumen of the tube. Not to go into detail, the most commonly accepted are:

(1) A persistence of the foetal type of tube. In the embryo and early life the tube instead of being comparatively straight is elongated and spiral-like in contour. A persistence of this type would make the journey difficult.

(2) Any previous salpingitis of the mucus membrane causing strictures, or lessening of the action of ciliated motion, or bands of adhesions about the tube.

(3) Abnormalities of the tube, such as blind pockets either within its lumen or blind accessory ostia without, into which the ovum might be drawn.

(4) Tumors of the uterus (myomata) or of the ovary pressing upon the tube and thus obstructing its lumen.

These are not all but will be sufficient to account for the obstruction to the passage of the fertilized ovum. The spermatozoon on its way to reach and fertilize the ovum is able on account of its small size and aided by its active motion to easily propel itself through constrictions and over obstacles in the tube which later are sufficient to impede the progress of the larger sized fertilized ovum that is being passively wafted by the ciliated mucosa from the fimbria to the endometrium.

Having found lodgment in some portion of the tube the ovum sets up a reaction in its wall practically similar to that which takes place in the wall of the uterus in a normal pregnancy, i. e., a placenta is formed, consisting of decidual cells from the tubal mucus membrane and chorionic villi and blood spaces invade the comparatively thin tubal wall, and by gradual growth penetrate it and weaken it at this point.

Meanwhile in the uterus a true decidua has also formed, and the uterus enlarges, somewhat more slowly than normal pregnancy, up to the third month, when its growth ceases. All the constitutional signs of early pregnancy progress as normally.

The logical sequence which follows is inevitable and may be passed over quickly.

(1) The rupture of the tube with hæmorrhage more or less severe, which may be either progressively fatal, or the foetus may be absorbed and the tube with its surrounding exudate organized.

(2) *Tubal abortion*, i. e., the foetus is extruded from the fimbriated end of the tube, absorbed in the general cavity and these cases may be either fatal or arrested with a mass remaining as an hæmatosalpinx. According to Clark, this result, an extrusion of the foetus without actual rupture of the walls of the tube, occurs in as high as 90% of his series.

But I am not going to weary you with a detailed recital of the conditions that take place after an active hæmorrhage has occurred. They are well known and well treated in all the text books and their diagnosis is easy. I think that I am safe in saying that all agree that given a diagnosis of an early extrauterine pregnancy the course of action to be advised is easy—extirpation of that tube. It may not go on to serious rupture, but the man, who feeling sure it exists and does not advise getting rid of it, is taking more chances of the good Lord's mercy than human experience warrants.

"The mortality of cases of ectopic gestation uninterfered with is 68.8% according to Schauta, reckoned on a basis of 241 cases. This

estimate does not include those early cases in which a rupture takes place without serious symptoms, and the patient complains of colic, goes to bed for a short time and the blood is soon absorbed. Veit reckons the mortality in cases in which an hæmatocele has formed as high as from 25 to 28%." (Kelly)

To come then to this typical symptom-complex of which I speak, and which may be grouped I think under six principal headings. I do not mean to say that every given case will present all of these symptoms, or that many more symptoms may not exist, but if we will pin our attention to eliciting this group, we have a nucleus around which to arrange the bewildering mass which crowds the pages of diagnosis in the ordinary text book. Many typical cases of appendicitis do not have pain over McBurney's point, or constipation, or what not, but we spot them nevertheless.

In point of importance I would place these symptoms as follows:

(1) A missed period—or a delayed period.

(2) The woman thinks that she is pregnant from other early signs, nausea, sensitiveness and fullness in the breasts, or milk after the third month, general constitutional disturbances, change in disposition, tastes, etc.

(3) Following the delayed period she has irregular bleeding. This is usually different from the menstrual flow, lasts a few days, stops, comes on again. With this there may be passing of shreds, or very rarely larger portions of decidua.

(4) Peculiar attacks of severe pain. The nature of this pain is characteristic. It is described as of a prostrating nature, lasts a few hours and then passes off. This is accompanied with marked tenderness without much fever, and then the patient may resume her duties again and feel practically normal except for some general abdominal tenderness.

(5) History of a period of sterility since the birth of last child, or history of a previous attack of pelvic inflammatory disease, or very important, a history of a previous extrauterine pregnancy.

(6) And of much minor importance—Physical findings of an enlarged uterus, soft cervix, blue vagina, and masses in the tubo-ovarian regions.

As the most important of these symptoms I should place—

(1) The irregular bleeding following a missed or delayed period.

(2) The sharp attacks of prostrating pain with general abdominal tenderness.

The irregular bleeding in a woman supposedly pregnant comes from the formation and casting off of the decidua from the uterus.

As distinguishing it from an early abortion, the flow is usually less extensive, is intermittent, extends over a longer period of time, is accompanied by shreds, and not as a rule by the large clots of an abortion.

The characteristic pains are caused by the stretching and giving way of the fibres of the tube, incident to the growth of the ovum as it invades the walls, or to the dilation of the fimbriated portion in the efforts of the tube to expel the contents. As soon as the tension in either event is relieved, the pain subsides temporarily. As to the character of this pain it is almost pathognomonic. It is not the grumbling pain of a belly-ache, it is not the sharp pain of a salpingitis or of an appendicitis, it is a prostrating pain which puts the woman down and out for a time, and then gets easier. It is analagous to the sickening pain which a man experiences on receiving a good sharp blow on the testicles. The tenderness following is undoubtedly explained by the peritoneal irritation of the blood, more or less in quantity, which escapes at that time.

(5) The history of a previous period of sterility or of previous pelvic inflammatory disease is of considerable importance. Both of these conditions being due to, or resulting in, some occlusion to the normal lumen of the tube, and so favoring the lodgment of the ovum, as we have seen.

(6) The misleading character of the pelvic findings is explained in several ways.

(a) On account of the existence in a large proportion of the cases of a coincident tubo-ovarian mass, resulting from the previous pelvic inflammatory disease that is causing the condition.

(b) On account of the difficulty in feeling a small tubo-ovarian mass in a tender abdomen.

(c) The history of the extrauterine condition unless carefully searched for, might easily be overshadowed by these conditions.

(d) An extrauterine in its early stages, especially if a tubal abortion with expulsion of the ovum has occurred, may not give a tumor of appreciable size, or rather hardness, to be palpated.

DIFFERENTIAL DIAGNOSIS.

Here again we are met in text books and in practice for that matter, with a myriad of conditions that might be confused in practice, they may often by exclusion, be narrowed down to a very few.

- (1) Salpingitis, acute.
- (2) Salpingitis, chronic, with acute exacerbation.
- (3) Appendicitis.

- (4) Tubercular peritonitis with effusion.
- (5) Ovarian cyst, especially with twisted pedicle.
- (6) Uterine pregnancy, with abortion.

I will not attempt to go into these in detail except to insist that the symptom-complex referred to will not fit any of them with any degree of exactness, with the possible exception of an intrauterine pregnancy with early bleeding. And this emphasizes the fact that especially in primipara, or in women who have had a more or less protracted period of sterility since their last child, the slightest variations from the normal course of labor — especially any slight irregular flowing — accompanied by recurrent attacks of sickening pain in the tubal regions, especially if occurring after lifting or stretching, should be viewed with the greatest suspicion.

TREATMENT.

Here is one of the few diseases where there is little room for argument, and may be summarized under three heads:

- (1) *Diagnose the case on the history.*
- (2) *Disregard physical findings.*
- (3) *Operate, and at once.*

Anyone who has ever had the opportunity to observe how speedily an apparently healthy woman can become moribund before his eyes, will hesitate to temporize even for an hour the next time.

The only possible exception to the latter rule would apply to those cases who from recent loss of blood are in such severe shock, that their only chance lies in waiting with the hope that nature may repair the damage sufficiently to tide them over the crisis.

Otherwise than this, I will omit the minor details of surgical procedure, and they are many, as not being germane to the subject which I intend to emphasize, viz.:

Extrauterine pregnancy exists much more frequently than is generally recognized. (In one hospital in this city in 1912 there was only six cases of extrauterine pregnancy operated on as against 224 cases of appendicitis.) Each unruptured unrecognized case should be a cause for alarm, as is well shown in Schauta's mortality of 68.8% in a series of 241 cases.

The six cardinal points of its symptom-complex should be indelibly fixed in our minds, viz.:

- (1) A missed or a delayed period.
- (2) Presumptive signs of pregnancy.
- (3) Following this at intervals, scanty bleeding — irregular and sometimes containing shreds.

(4) Attacks of characteristic, prostrating, sickening pain. Followed by relief except for general abdominal tenderness.

(5) A history of previous sterility or previous pelvic inflammatory disease.

(6) Physical findings pointing to tubo-ovarian disease.

The first diagnosis of unruptured tubal pregnancy was made in Germany by Velt, in 1883, and by Janvrin in America in 1886. The first case of unruptured extrauterine pregnancy which was diagnosed and operated on, was by Kelly in Philadelphia, in 1886. So that we are now standing, as regards the early diagnosis of ectopic gestation, at about the same point at which we were in regard to appendicitis twenty years ago. At that time the physician who, after careful weighing of the symptoms, now so familiar, finally staked his reputation, and reluctantly — somewhat against his better judgment, allowed his patient to be operated on, and at operation found a perforated appendix with a tumor mass, or a walled-off abscess that could be drained without a following general peritonitis or fecal fistula — such a man patted himself on the back and said, "Well done — it was appendicitis." Today, we do not wait for tumor masses or signs of a spreading peritonitis, but consider ourselves, or if not ourselves, someone else upon whom we can lay the blame, very much at fault in waiting to be absolutely sure. We take a gambling chance, and that with the odds greatly in our favor and the cards stacked against failure, when we go in on well recognized presumptive signs.

If, after all, the appendix in a few cases does not look to be in as badly diseased a condition as we expected — we remember the better chance the majority of patients operated upon under these conditions have had, and the courage of our convictions is not weakened when the next case is approached. But, on the other hand, when we see the next case that has been allowed to proceed to the abscess or general peritonitis stage, we rather condone our brother's diagnostic ability.

My contention is that we have not advanced quite to this stage in the early diagnosis of ectopic gestation. We are prone to wait for the later degrees of severe pain, for the unmistakable evidence of extensive hemorrhage, the pallor, clammy extremities, air-hunger, etc.; for the demonstration by percussion of free blood in the peritoneal cavity; for the palpation of a boggy clot, until we are willing to take the chance of risking our diagnostic ability. I am sure that if as much stress would be laid upon the symptom-complex of an early ectopic gestation and that if we were to follow our convictions as

boldly as we do in the appendix diagnosis, our attitude to the man who presented his case of extrauterine in the late stages, would soon be the same as it is today in the case of the appendix abscess.

I do not of course mean to say that every case of severe hemorrhage could have been diagnosed earlier from the history. There are fulminating cases of ectopic just as there are fulminating appendix abscesses. But I do hold that the vast majority of them can be diagnosed if this presumptive history is kept in mind.

I recollect at a small medical meeting similar to this, when this same subject had been under discussion, Dr. Osler, who always had a profound disregard for surgeons and gynecologists, arose and said something along this line:—"When my friends, the gynecologists, stand finally before the throne of the day of the Last Judgment to answer for all the unnecessary and foolish surgery that they have committed, in the name of their science, on poor unprotected womanhood, I shall ask St. Peter, — and my influence is great with him in affairs medical, — to remember the countless lives they have actually saved by their recognition of extrauterine pregnancy and its prompt treatment. And I am sure that many a one of them will be saved by this plea and on this account alone."

I hope that Sir William will pardon me for so bungling a paraphrase of what he really said. And I also hope, gentlemen, to live to see the day when a gynecologist can look with as calm and sphinx-like an expression upon an abdomen opened with the idea of finding an ectopic gestation, and being confronted with some other condition, as he now does when he serenely removes a so-called "cirrhotic," or say "congested," or say "constricted" appendix.

***THE CAUSE AND CURE OF ECLAMPSIA.**

ADAM P. LEIGHTON, JR., M. D., L. M. (DUBLIN).

Eclampsia may be aptly defined as the "occurrence of fits in a pregnant woman which would not have occurred had she not been pregnant."

Today, I wish to briefly describe the treatment of eclampsia, or rather the methods of treatment as adopted and systematized by Dr. E. Hastings Tweedy of Dublin, Ireland, and Professor Straganoff of St. Petersburg, — prefacing the account of their conservative line

of therapy, with a consideration and assertion as to the possible cause of this disorder.

It is not within the province of this short dissertation on the cause and cure of eclampsia, to quote voluminously the large number of theories put forward to explain its incidence, neither do I wish to bore you with extracts from the multiplicity of treatments recommended for the relief of this malady. As to the explanation of the etiology of eclampsia which I intend to present, I would say that it embodies the recently published theory of Dr. Tweedy of Dublin, to which I have the temerity to add some personal theorization. Regarding the cure of this disease, I present this article in the form of a plea for the consideration of a more conservative treatment,—that therapy which will lessen the appalling foetal and maternal mortality, coincident with the present accepted mode of operative treatment.

There is no subject in obstetrics or midwifery to which greater interest attaches, than to that of eclampsia. In truth it may be said that our knowledge of its pathology and etiology is as obscure as the symptoms of the disease are well known to each and every one of us here congregated. It is called the Disease of Theories, and rightly, too, on account of the vast number of theoretical explanations given to prove its origin. Experimenters and clinicians have for years endeavored to uncover the true causative factor, but without success, and the treatment has been altogether empirical up to recent times.

However, of late, there has been a remarkable agreement shown in the profession, to attribute the symptoms to an auto-intoxication of some kind. We most of us are willing to accept this theory or fact, I think. Whether it is an auto-intoxication arising from foetal, maternal or placental parts is the question in the toxic theory to be answered.

The theory of ovular origin, The Reflex Epilepsy Theory, The Thyroid Theory, and countless others, all make interesting reading and doubtless some of them are of infinite worth. They all have their firm adherents, but the most of us hark back to the theory of toxic origin. But where do these toxins originate?

The statement that I have now to make is that FOOD is the actual exciting cause of eclampsia and the primary cause of toxemia giving rise to heart failure. This has been partially known for years as is proved and made apparent by the popularity of an all milk diet as a prophylactic against eclampsia. That the blandest forms of food,—milk, whey, etc., can have any harmful effect is a point which will require very convincing proof however.

If food is the offending agent, how does it exert this action? Is it the irritating effect of the foodstuffs that excites the convulsions? I do not think so. This at first seemed a plausible explanation, but as an irritant it would be hard to conceive any food as drastic as Croton Oil, yet my short experience with this drug enables me to say that it shows no tendency to increase the severity of the eclampsia. Most of you, no doubt, can cite the same instance.

One might think he recognizes decomposition as a possible factor in the disease, but it seems doubtful if the deleterious action could thus be accounted for, because fits at times occur or recur so soon after the administration of certain food as to preclude the possibility of decomposition.

Pregnancy is, of course, a predisposing cause, and the reason for this is unexplainable, but it is quite easy and interesting to theorize on the subject. Observation has shown us that many pregnant women do not drink sufficient fluid. Concentration of the toxins which arise from foetal and maternal waste may overtax the excretory organs and cause degeneration. The boulimic tendency and cravings of many women in the pregnant state, due entirely to the accumulation of toxins, will cause much indigestible and unsuitable food to be ingested, which is generally incompletely masticated. I have observed the most extraordinary amount of debris removed from the stomach and bowels of eclamptics, by lavage.

It seems probable, therefore, that food particles are permitted to enter the circulation ununited or incapable of uniting with, their proper antibodies. Some observers have tried to prove the existence of an anaphylactic condition in eclampsia, although so far the experimenters have centered their efforts on the placenta as the structure at fault. Dr. Tweedy makes this ingenious suggestion, — Why couldn't substances taken by the stomach act as anaphylactic poisons? In other words, he means that the epithelium of the stomach has been assumed to be protective in this particular. Why it is so is at least surprising. All other tissues of the body are liable to degeneration. The kidney epithelium, when diseased, allows for the passage of albumin, and in a similar way the liver and pancreas can cease to functionate. Why this rule should be withheld from the stomach epithelium would be wonderful if it were true. But that it is not true will be proved in the further study of eclampsia, no doubt.

My experience in the practice of obstetrics is, of course, decidedly limited, but I am certain that I have observed or attended cases of eclampsia wherein I could absolutely attribute the symptoms to the harmful effect of food. I do not think it is a matter of coincidence. My reason for upholding this conviction is not based on exhaustive

experimentation or study of the disease, but simply from the observation of several cases in the Rotunda Hospital, and one, at least, of three cases which I have attended the past year. In these the etiological factor of food has been almost positively proven.

The brevity of time allotted to each paper makes it necessary to eliminate a detailed recital of clinical history, but I want to present three or four cases which may prove interesting. The first three cited are from Dr. Tweedy's list, and the last is concerning a Portland woman whom I attended in eclampsia, in conjunction with another Portland physician.

The first was Mrs. L. C., who had eight antepartum convulsions. She received the so-called "Morphine Treatment," which I shall presently describe. She was conscious for forty-one hours before delivery. Two hours after delivery she was given two ounces of milk and received four pints in all within the next twenty-eight hours. She then showed signs of severe intestinal toxemia and had five convulsions. A large quantity of sour curd was washed from her stomach by lavage, and thorough rectal lavage brought away a large amount of flatus and fecal material. Following this she recovered consciousness for thirty-eight hours, during which time she got no food. More nourishment was then given her, — milk in small quantities, when, after the ingestion of some few ounces, she had a third group of convulsions, amounting in all to more than one hundred. Her bowels had not moved for thirty-one hours and severe abdominal distention was again a marked feature. Starvation plus the stomach lavage and rectal irrigation again resulted in a return of consciousness. Food was withheld for a longer period of time and she ultimately recovered.

CASE TWO. Mrs. A. R., had four antepartum fits, followed in twelve hours by a forceps delivery, after which she regained consciousness in six hours. Sixty-nine hours after regaining consciousness she was given an ounce of milk, five ounces at the end of one hour, and again five ounces in three hours. Half an hour after the last dose there was a recurrence of convulsions — three within an hour. They yielded to usual treatment and she remained free from them for thirty-six hours. Four ounces of whey was given and she immediately had another group of five convulsions occur.

CASE THREE. First seen in labour. Had albuminuria and pre-eclamptic signs. She delivered herself of a stillborn child and slept well that night. She was given milk and water in large quantities and soon complained of dimness of vision and severe headache. The ingestion of milk and water continued, and at noon on the day following confinement, she had three severe fits and passed into deep coma and died.

CASE FOUR. Mrs. R. of Portland. A multipara. Gives history of several abdominal operations, performed for intestinal obstruction, appendicitis and adnexal disorders. An abnormal appetite always, as regards amount and selection of food. Had no albuminuria preceding the onset of the eclampsia. Diet had been restricted somewhat. She was suddenly taken with convulsions and immediately removed to my hospital, where morphia and eliminative treatment was instituted. She was after a while freed from her convulsions by the use of morphia and passed into a deep coma. She received $2\frac{3}{4}$ grains of morphia the first twenty-four hours and thorough elimination was gotten by the use of gastric and rectal lavage, combined with Croton Oil and Jalap Powder introduced through the stomach tube. 400 cc. of blood was taken from the basilic vein, on account of the high blood pressure. Twenty-four hours after admission she fell into labour and after full dilatation of the cervix, she was assisted by forceps. She received no food for ninety-four hours, then malted milk made with water was given in small quantities. The bowels were kept well open. Consciousness had returned soon after her delivery. On the eighth day after admission she expressed a desire to be taken home to convalesce, as she wished to save the hospital expense. She was taken home that afternoon in the ambulance. Her condition was excellent, and she was receiving only small amounts of malted milk and all the water she could drink. The laxative was inadvertently omitted that night. On her return home the diet was increased slightly by the family on their own responsibility. I believe she received some broth, toast, and some custard; anyway I know she was given a glass of milk, and the next morning she drank two more. I was called to the house some few hours after the ingestion of the milk and found her in deep coma, following three convulsions, *eight and one-half days after the cessation of the initial convulsions*. These ceased upon the institution of the usual treatment. The urine was heavily loaded with albumin, and it had been quite free upon her return home. She was kept on starvation diet and ultimately recovered.

What, then, was the cause of this partial recovery with relapse? The only explanation that I can make is that recovery slowly took place during the starvation period. The factor operating adversely was the milk or food given when consciousness and convalescence had been long established. I do not mean to give the impression that such food products as milk and whey are the only ones capable of exciting the eclampsia. Any food, or rather improper food, will cause it. In the pre-eclamptic stage there is aberration of digestion, and in the period of unconsciousness digestion is absolutely in abeyance. It is

at these times that food exerts its most harmful action. We all think we are supporting the patient's strength and enhancing the patient's ultimate possibility of recovery, by administering nourishment after she has struggled to consciousness through this terrible disease. This is the mistake. We should withhold all food for a considerable length of time, in fact, literally to starvation. I have no doubt that proteid and foods of a large nitrogenous content are the chief trouble makers. For this reason it seems that carbo-hydrates are more desirable when nourishment finally has to be given.

Now as to the treatment of this disease, I might say that the two methods to be described — the Dublin method and Stroganoff's — are similar. They are truly conservative. Tweedy, the leading exponent of the Dublin method, and Stroganoff have obtained the best results on the treatment of eclampsia, known to the medical world.

The keynote of this conservative treatment is that accouchement force or immediate operative treatment is contra-indicated and especially harmful. The American School, in direct opposition, is almost unanimously in favor of prompt evacuation of the uterus in eclampsia.

I want to ask if there is any surgeon here today who would operate on a patient with severe alcoholic toxemia, except in the presence of the gravest surgical emergency? I think not. Then why isn't it logical to postpone active surgical treatment, for a reasonable time, on the eclamptic, and give eliminative and sedative treatment an opportunity, to better prepare her to withstand the added strain of delivery? Personally, it seems rational to me that when the shock of accouchement force is hastily imposed upon a poisoned, toxemic, irritative nervous system, that many a woman will be sent to her grave, who would have recovered if she had been given more conservative treatment.

The Dublin method of treatment rests upon four principles.

(1) Delivery when possible only. Accouchement force is not advocated in any form.

(2) Limit metabolism and avoid further metabolism. This is done by starvation, morphine and gastric lavage.

(3) To aid excretion. Purging and irrigation of the bowels. *Sweating is never done.* Bleeding in specially selected cases. Infusion of breasts with soda bicarbonate solution. Saline is not used as it is not eliminated in kidney disease and it leads to locking up of fluid in the more solid tissues.

(4) Treatment of special signs, such as respiratory weakness, cardiac weakness, etc. Morphine is used only to control the fits.

On commencement of the treatment, one-half grain of morphine

is given, followed every two hours with a quarter grain while the fits persist, until two grains in the twenty-four hours are given. Three grains may be given in many cases. When respirations fall to six or seven a minute, it is an indication that enough morphine has been given. Atropine or scopolomine may be substituted.

The stomach is washed out and a purgative poured through the tube. There is no importance to the nature of the purgative; it must be efficient. After stomach washing a catheter is passed, the urine drawn, measured and examined. The patient is turned on her side and the rectum and lower bowel thoroughly washed out with a solution of sodium bicarbonate, through a long rubber tube. Lavage must be very thorough and the procedure persisted in until large amounts of fecal matter have been washed out.* When the bowel is well cleared, leave $1\frac{1}{2}$ pints of the sodium bicarbonate solution in the rectum.

If the urine remains scanty, submammary infusion of a similar solution is practised.

Lay the comatose patient on her side, almost on her face, so that the mucus may run out. This is a matter of great importance, for if a patient lies on her back, mucus and saliva trickles over the insensitive larynx and adds to the œdema of the lungs. I have no doubt but that this is the most fruitful cause of the pulmonary œdema of eclamptics.

Labour is never induced, but if it should take place its progress is, as a rule, never interfered with. When labour has continued to a point where the os is sufficiently dilated, forceps may be applied and the patient aided in her delivery.

Stroganoff's treatment is almost identical, except that he uses chloral in large doses, by the rectum, in conjunction with the morphia. Irrigation, examination, lavage, etc., is done with light chloroform anaesthesia.

With this condensed presentment of the treatment, may I give a few figures and statistics on which to base my argument in favor of the expectant treatment?

The rate of mortality in the United States, gathered from nine leading lying-in hospitals during the recent period of five years, is 38.4% in seventy-eight cases. The Royal Maternity of Edinburgh gives 66.6%. Guy's Hospital in London about 25%. Williams gives

*The passing of the colon tube is a most important question of technique. The simple introduction of the tube through the anal opening until the greater part has disappeared is no proof that the tube has passed to the sigmoid. On the other hand, more frequently does it curl up in the pouch of the rectum; therefore, we only get a return flow from the rectum during irrigation. A digital rectal examination should be made in each case to insure the proper insertion of the tube.

a mortality of 20% to 25%. DeLee gives over 20%. McPherson of the New York Lying-in Hospital states that theirs is 30.8%. Engleman gives 21%. Edgar states his as 20%. Dührssen of Vaginal Cæsarean fame gives 16%. These figures are all given by men who believe in accouchement force or immediate delivery.

Now let us note the results gained by Stroganoff and Tweedy. *From 1903 to 1910, Tweedy treated sixty-six cases after his method, with six deaths, a mortality of 9.9%. In the year 1911, he treated eight more cases without any deaths, hence his record is 8.11% in seventy-four cases!* In 1893, the Morphine treatment was re-introduced in the Rotunda Hospital by Sir William Smiley. Before that time the mortality was 35.3%. It fell to 20% in those cases treated by morphine during his mastership and that of his successor. Now Tweedy has reduced it to a little over 8%.*

Stroganoff has treated personally three hundred and sixty cases of eclampsia, with a *maternal mortality of 6.6%*, and a *foetal mortality of 21.6%*. Six hundred cases have been treated in Russia, according to his method, with a maternal mortality of 8% and a foetal mortality of 21%. Sixty-one cases have been treated in Germany in the same way with a *maternal mortality of 6.5%* and a *foetal mortality of 18%*. Roth recently reported from Dresden thirty-one cases so treated with only one casualty.

These statistics must command one's attention. They are gleaned from the results of the treatment of a large number of cases extending over a long period of time.

I realize that medical journals are replete with statistics and reports of special treatments for this disease, and that the results as indicated in percent mortality are uniformly good in most cases, but can any of them show results like those I have just read?

Tweedy's foetal mortality, in the seventy-four cases just mentioned, was 30%. Stroganoff's I quoted with his maternal mortality. Foetal mortality in our text books, outside of expectant treatment, is generally given from 33% to 50%.

Vaginal Cæsarean section in eclampsia has been much in vogue of late, but this "Now you see the bladder and now you don't" operation is fast being condemned. The results have been unfortunate, even in the hands of the cleverest operators.

As far as abdominal Cæsarean section is concerned, it must be admitted that perhaps here we have the solution of the question in some cases. I doubt if we can place this within the limits of strict conservatism, but I venture to say that occasionally we will resort

*Tweedy has reduced his per cent to 8.3, in 1912.

to its use in eclampsia. In this regard there is now a general consensus of opinion that, in certain cases, — there are, of course, few in number — Caesarean section is not only permissible, but actually the treatment indicated. The cases on which this operation is to be done are those where the eclamptic seizures are of great severity, and, above all, when the cervix is not taken up and is very rigid and undilatable. Of course I mean that the morphia treatment should be given a full trial previously.

In the treatment of eclampsia, then, avoid first accouchement force. Vapour baths, or any means to promote diaphoresis, are obviously improper methods. Eclamptics are suffering from a paucity of fluid in the circulation, and this in spite of the tissues being possibly solid with œdema. What is wanted is a less saturated condition of the blood, and it is impossible to suppose that profuse sweating can have any other action than to increase this abnormality. Only a minimum of toxins can be thus eliminated, if any.

No other disease better repays the attendant for personal supervision. Patients with profound toxemia make a tedious recovery. Elimination is always slow. Heart failure may supervene, although no new poison may be added to the blood. For these reasons a certain number of deaths must be expected. Nevertheless, it is impossible any longer to pretend that the treatment of eclampsia is either empirical or useless.

Medical Anecdote.

Fee Splitting in Switzerland.

Apropos of this loudly discussed question in America, the British Medical Journal for December 6, 1913, contains an odd story, from which we glean that a notable surgeon in Paris called in from Switzerland, one whom we can probably guess by name without naming him at all, simply saying that he understands something concerning goiter. The specialist arrived, the consultation was held, an opinion expressed that an operation should be performed and it was done. Immediately afterward, the surgeon from Paris informed his colleague from Switzerland that he should look for half of the fee. The specialist went home, sent in his bill to the patient for the sum of a couple of dollars, and when it was paid, sent one of them to his colleague in Paris.

The story is good, but it must be confessed that there are very few surgeons making so much money from their practice that for the sake of protesting against the splitting of fees, they could afford to travel a long distance and actually operate for almost nothing at all, rather than to stand up and be counted in what they considered a disgraceful proceeding.

J. A. S.

Necrology.

WILLIAM EDGAR RICE.

One of the most agreeable and charming gentlemen and physicians that I ever met in my practice of forty years of medicine in Maine was Dr. Rice of Bath. I often had the pleasure of meeting him in consultations, he assisted me several times at operations and he was an honored guest in past years at my home at meetings of the Portland Clinical Society. It is hard to feel, as I do, so great a personal loss in his death.

Dr. William Edgar Rice died very suddenly on Wednesday afternoon, the 17th of December, 1913, at his home in Bath, where he had practiced for five and thirty years with good success. He had long suffered from a chronic disease of the heart, but after recovering from a severe cold at Thanksgiving, seemed in his usual health on the day of his death. He left his office early in the afternoon and was putting the stray branches of a vine upon his house into proper shape, when he suffered an apoplectic stroke, managed in some way to reach the ground and to call for help, but in spite of every effort he failed to rally and in a few moments had ceased to live.

He was born in Bath, May 12, 1852, the son of the late Hon. William Rice, who as a young man came from Vassalboro to Bath and went into the lumber business under the firm name of Rice & Robinson. Dr. Rice's mother, was Miss Sarah Robinson, a daughter of Mr. Rice's partner in business. Mr. Rice was Mayor of Bath several times, and possessed a fine voice which he utilized in singing and was known as composer of a melody to that well known hymn, "Guide me, Oh Thou Great Jehovah."

William Edgar Rice, the son of this gifted couple, was educated in the schools of Bath and was graduated at Bowdoin in the class of 1875. He studied privately for a time with that sterling practitioner the late Dr. Tristram Gilman Stockbridge of Bath, and finally obtained his medical degree at the Columbia Medical School in Washington, D. C., in 1878. He settled at once in Bath and remained there for life. He belonged to various local medical societies as well as to the county and State medical associations, and attended often. He does not however, seem ever to have read a paper before any of them, but was nevertheless a very clever speaker on favorite themes of his in medicine: such as tuberculosis and cardiac affections. As a practitioner of medicine he possessed great natural ability, and as a man of highly generous disposition was deeply esteemed by his patients, his

townspeople and the profession. He served many years as Port Physician at Bath and was a public spirited man and physician.

Dr. Rice in 1881 married Miss Kate Houghton of Bath, who died not long since, remaining to the end of her days a most delightful woman to meet. After her death, Dr. Rice never seemed the same man and was undoubtedly much affected by her sudden death. Personally, Dr. Rice was a fine man to see, and to meet. He always dressed so neatly, was so punctiliously clean, was so genial a conversationalist, that it was a great pleasure to have known him. My chief regret in parting here from him is that we could not have lived still nearer together, so that our meetings might have been even more frequent and profitable than they were.

J. A. S.

EDWARD NETTLESHIP.

One of the last of the Staff of the Moorfields Eye Hospital with whom I studied in 1870-72 before coming to Portland, Edward Nettleship, F. R. C. S., the eminent ophthalmic surgeon, is dead. He passed away early in October from a malignant disease of which he had long been aware; but he faced the end bravely.

When I went to Moorfield in 1870, directly after graduating from the Harvard Medical School, I found Mr. Nettleship the Curator and Microscopist. From my very first day there, he took pains to pick out for me the interesting ophthalmoscopic patients, gave me all that I could possibly attend to in refractive cases, and when the clinique was closed for the day, we examined slides and specimens together. During his vacations, and often times when he was otherwise busy, he got for me the chances to give the chloroform for the cataract and glaucoma patients, and it would seem from memory that in my two years at Moorfields, I must have chloroformed one thousand patients; strange as it may seem now, in the days of cocaine. This occupation gave me a much desired chance to stand side by side with the great men of that era. Well do I recall, Bowman, Wells, Critchett, Jonathan Hutchinson and others, whilst v. Græfe, Donders and celebrated oculists from the Continent were often dropping in on their way through London. Those were famous days in Ophthalmology, for the ophthalmoscope had not long before been discovered, Iridectomy was all the rage in glaucoma and the Græfe operation in cataract, the only one of value.

In the midst of these world celebrated men, Nettleship moved to and fro, suave, genial and very clever. I saw him almost daily

for two years and more and I parted from him with regret. I followed his career with interest; his numerous papers in Ophthalmology, and his invaluable "Text Book on Diseases of the Eye." We corresponded from time to time, and met once more at the British Medical meeting in Montreal, where he was Chairman of the Section of Ophthalmology. We met once more with pleasant anticipations, and mutual gratification, and had several genial conversations.

Edward Nettleship will long be remembered as a careful writer on many branches in his chosen specialty, and particularly for his extraordinary studies on the influences of heredity in diseases of the eye, a topic to which he devoted chiefly the last ten years of his life. Ten years ago he retired from active practice but instead of falling into useless idleness, he devoted all of his time to his favorite study, and leaves behind immense material for farther prosecution of his ingenious investigations.

J. A. S.

MEDICAL NOTES.

Choroidal Rupture.

A curious and probably unique case of double choroidal rupture is reported in the transactions of the Berlin Ophthalmological Society for July, last. A man carrying a heavy load in his hands found it slipping away from him, and in an effort to save it from falling on the ground and breaking, he strained himself, felt a pain in both eyes, and soon discovered that his sight was affected. The examining oculist discovered two radiating ruptures in the choroid of each eye. Most choroidal ruptures are concentric with the optic papilla, so that the radiating injury here reported is very rare.

The Turning Red of Eserine.

Oculists may unintentionally excite a state of uncertainty in the minds of their patients for whom they have prescribed eserine, by its turning red without any warning. If a patient sees his eye lotion turning red, he may be inclined to believe that it is unfit to use. If warned beforehand that it may so turn, his confidence in his adviser is not weakened. This discoloration, it may be mentioned, is not due to any fault in the drug or in the manner of compounding, but depends on a chemical reaction between the eserine and an alkali in ordinary glass containers.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Editorial Comment.

Conservation of Vision.

The committee on conservation of vision representing the Council on Health and Public Instruction of the A. M. A., the American Society for the Control of Cancer, and the Clinical Congress of Surgeons has started a campaign of instruction in each State of the Union, similar to the one carried on by the committee on public health and others. It was first necessary to secure one man in each State who would devote the necessary time and energy to carrying on this work. The matter was presented at the last meeting of the eye and ear section of the Maine Medical Association and Dr. Spalding of Portland were unanimously endorsed for this position while the members of the association offered to assist him in any possible way in carrying out this most valuable work. It is to be hoped that during the next few months there will be started lectures on this important subject of health.

We are not in a position at this precise moment to outline the entire range of topics to be considered, but we may suggest that it will include the use and care of the eyes amongst students at school and in college, the proper illumination of all rooms used for study, the proper utilization of test type for discovering defects of vision, and the risks of using the eyes long at a time with poor light and badly printed books. Trachoma and ophthalmia neonatorum will be depicted by slides from stereopticons. The treatment of simple accidents will be mentioned, and something said concerning the dangers of sympathy extending from an injured eye to the other. The field is wide as can be easily understood, and the committee already at work in furthering the project will welcome volunteers from the ranks

of all physicians, even if they may not at all specialize in diseases of the eye.

It will be readily seen that even one lecture in each county in the State will call for sixteen lectures, whilst if we multiply the opportunities for lecturing by from three to six meetings in each county, the task assumes at once considerable magnitude if we hope to carry out properly the extensive program already suggested. The object of our remarks is at this juncture to ask for assistance from the members of local medical societies with a view of obtaining Board of Health physicians who will aid in the plan which promises so much for the people. To those who will come forward we can offer an abundant amount of literature and matter for the public press, but each lecturer will have to bear the burden of his expenses of travel. For that very reason, we suggest that the larger places in the State be utilized for the lectures so that physicians need not travel far, or can lecture, practically speaking, at home, and from such foci the report of what they each say will be expanded throughout the State. Even thirty lectures in Maine in one season will make a good beginning in a national campaign of the Conservation of Vision and in Conserving Vision let us not forget that really we are appointing ourselves a State Committee for the Prevention of Blindness.

Another Mal-practice Suit.

We are again reminded of two facts. First: the exhibition of appreciation of some of our charitable cases, and secondly: that we still have some members of the legal profession who will carry an obviously lost case into court, hoping that, at the last minute, the defendant will offer some settlement. Such a case was brought against our president, Dr. W. C. Peters of Bangor, and was promptly non-suited.

It is interesting to note that Drs. Hunt and Nealey, who were put on the witness stand for the prosecution, both testified to facts which immediately showed that there were no grounds for a suit. The accident happened in January, 1912, when the complainant's leg was crushed near the thigh by the falling of a pile of wood. He was taken to the Eastern Maine General Hospital where Dr. Peters attended him. He left the hospital seven months later and brought suit against the defendant for unskillful treatment, with the above result.

This case reminds us of the following note which appeared in the West Virginia Medical Journal, December, 1913:

"The plaintiff fell from the top of a carload of logs as it was passing over a high trestle, making the height from which he fell at

least 25 feet. He sustained a compound comminuted fracture of the lower ends of the radius and ulna and some of the carpal bones, with very extensive crushing injuries to nearly all of the soft structures and joints at the wrist, and a dislocation and fracture of the elbow, with much damage to the soft tissue there. Six hours after the injury occurred, during which time the only treatment he received was at the hands of his women folks at home, he was brought to Dr. Golden by his home physician for an amputation of the forearm. With the spirit of a true surgeon, Dr. Golden preferred to make an attempt at conservatism, and after much painstaking hard work, he succeeded in saving the entire extremity. This occurred about sixteen months ago, and now for nearly a year the plaintiff has been working as a fireman on a locomotive, using that hand very efficiently to handle a coal shovel. But the wrist is stiff and somewhat deformed and the tendons of some of the fingers are not as free as they used to be; and therefore the plaintiff claimed damages to the amount of fifteen thousand dollars. The trial lasted three days and at its conclusion the judge directed the jury to bring in a verdict for the defendant. Before rendering his decision, Judge Kittle analytically reviewed all the testimony in the case and discussed the laws governing such cases. A number of prominent physicians from different parts of the State who were present at the trial report that the judge's discourse was a masterpiece of logic and an exhibition of a phenomenal memory. We may have more to tell about this case in a future issue. In the meantime we congratulate Dr. Golden and the profession of the State upon this victory."

Standardization of Hospitals.

We called attention in a recent editorial to a series of medical papers issued under the auspices of the management of the Episcopal Hospital of Philadelphia as an example for hospitals in Maine to emulate. We then promised to return to the subject of hospitals and to present additional facts to show how those in Maine fail to utilize for their own benefit, and for the benefit of the profession the enormous mass of medical and surgical material at their command. It is for us, now, to call attention to a method which has lately been suggested to assist the hospital authorities in utilizing their material; first, in such a way as to interest the State in the great amount of charitable work performed, and thus to prove the need of larger public endowments; secondly, to enable the profession to study the histories and results of operations and treatment and thus to advance medicine as a science.

At a late meeting of the Clinical Congress of Surgeons a report was offered regarding the standardization of hospitals by means of

sets of cards recording the admission, diagnosis, operation, results of operation and treatment of patients. Each card is to contain the name of the hospital and of the patient, with a brief history, probable diagnosis, date of operation, post operative diagnosis, and complications of convalescence. This card goes with the temperature chart to the patient's bedside, and at the date of discharge is properly filled out and marked correct by the surgeon. It is handed to a secretary by whom the data are transferred to a permanent card, whilst the original is given to the patient. Similar cards are furnished for medical cases without an operation and all are filed, and cross indexed with the name of the disease. If a patient returns, a new card is given, and the old one marked "returned for observation." With a second discharge, another card is filed as before.

Every morning the clerk writes to each patient who was discharged one year before, asking a report, personally or written, of the patient's condition. When a reply is obtained (and in one hospital in which the system has been in use a little over two years, more than 50% replied) the answer is noted on the former card and again filed away.

Here then is a simple plan to discover hospital results. It is at the least, better than the no-system prevailing in Maine. It is at present nobody's business to see if the patients get good results. The Trustees leave it to the staff, and the staff don't want to mention their own or a confrere's failures. The superintendent, even if he is aware of any incompetency, has not the power, inclination or courage to protest.

Each hospital ought to have an efficiency committee, to call attention to waste and to gain the attention of the superintendent and of the trustees. If an efficiency committee can show the State that a certain hospital makes it somebody's business to find out what becomes of the patients, and of the charity given, such an institution will get more help from the State.

The cost of cards is small, but even with the added cost of a secretary it would be worth the while by saving waste. And by waste we mean that every day a patient is delayed in the hospital by sepsis, every day a patient has to wait in the hospital before an operation is performed, every bed used by a patient unnecessarily when another is waiting to enter; all are waste.

Amongst the advantages of the cards from a surgeon's point of view are, that at any moment he can get at the history of a former patient's history, and from the cross index he can discover any disease for report before a society or for self instruction in a case before

him and now needing a rare operation. The cards save labor in making the annual report. They permit a constant weekly review of what the hospital beds contain. Statistics of common diseases can be rapidly obtained, as well as the frequency of certain diseases. The prognosis of diseases would be clearer to the operators. The profession would discover if certain operations were worth doing. Local practitioners of medicine would know if certain hospitals were doing good work, and whether they could safely recommend their patients there, or should send them to a larger medical centre. It would soon be known which institution was doing the best surgery. Furthermore, migratory cases could be hunted up and out from other institutions. The plan saves waste of time, when, as at present, histories and records are drafted on sheets of paper, often poorly written, then rolled up like music, tossed to and fro, and by and by copied, again in poor penmanship, into volumes where they remain unexamined for years, and in which, without any system of indexing, it is almost impossible ever to find them again at all.

Finally, we advise the card system of standardization because it would refresh the personnel of the staff, and lead to the retirement of men who, unconsciously to themselves, were prematurely ageing, or even in their youth were steadily doing inefficient work.

County Secretaries and Editors.

The advisability of calling a meeting of the county secretaries and editors, to be held at some central point in the State, is now under consideration and we sincerely hope it will materialize. For the past few years there has been a national association of the State Secretaries and Editors which meets each year on the evening previous to the opening of the general session while in February of each year, there has been a meeting of the State Secretaries. In both instances they have been the guests of the A. M. A. The object of such an organization is obvious in that the A. M. A. is made up of State societies which in turn must have some inter-communication, owing to problems rising from time to time, so that these meetings are devoted to questions involving stronger organization work. In the same manner the State societies are made up of county societies, each trying to work out its own salvation independent of the others, some few adopting plans of operation which have proved very satisfactory, others still groping for some satisfactory method of procedure.

A meeting thus outlined would bring together a representative from each county where there would be an opportunity to discuss the work being done in the other counties, formulate new plans, and return with new enthusiasm to a field of work which has become un-

interesting, owing to lack of enthusiasm shown by the members. The Journal is strongly in favor of such a meeting to be held within the next two or three months and a second one to be held in June. This would give ample time to organize and formulate some plan of work. We believe that the State association should be the host in such a meeting and that each county should bear the actual traveling expenses of their representative. In this way, it would be no great hardship for any individual or organization.

The Workmen's Compensation Law in Wisconsin for 1913.

The original workmen's compensation law as passed in Wisconsin in 1911 was considered the best law ever obtained to safeguard workmen from injuries occurring during their various employments. It was, however, found unsatisfactory in some points, was amended in 1912, and now we have before us the report of the results of the Act for 1913. From this it appears that 88% of all the employers accepted the conditions of the law, and that about 6,636 cases of injury were paid for during the year at a total cost of \$417,374, or an average cost of \$62.89 for each person. To this sum we add medical costs of all kinds \$208,687, and we have a grand total of \$626,061, as the cost of 88% of all industrial accidents in Wisconsin in 1913. The remaining 12% were settled for by employers who declined to accept the provisions of the law.

Without going into the average benefit obtained by the workmen, we now call attention to the topic from a medical point of view, and we find that if we divide the sum paid for medical services of all kinds by the number of accidents, we obtain an average medical cost of about \$31 for each injury. This average seems small. Although we do not have at present on hand the sum for medical costs which went exclusively to hospitals, and from which the attending physicians obtained no pay at all, it would seem that the medical payment to the physicians was very small in proportion to what it should be. Either the injured are overpaid or the physicians are underpaid. The question should be studied at once by every physician throughout the country. It shall also be our duty to investigate later in the Journal the exact details of this point of the question.

It is furthermore well known that at the next Legislative meeting at Augusta in January, 1915, a new Workmen's Compensation Law will be introduced and in all probability passed. It will therefore be the duty of the Maine Medical Association to keep constantly on hand in the legislature a competent attorney to safeguard the compensation to be guaranteed to physicians attending the injuries of workmen un-

der the new law. A careful study of reports from other States should early be advised by the president and executive of the association, in order that our attorney may be prepared to obtain the best possible remuneration for services now apparently underpaid by States which have so far passed Workmen's Compensation Laws. The recent decision of Wisconsin courts that fees for performing eugenic examinations were too low, offers us an opportunity for putting our charges under compensation laws at a just and remunerative amount and of incorporating them in the law before it is passed.

Boycott of the Proposed Twelfth Ophthalmological Congress at St. Petersburg in August, 1914.

Owing to the extraordinary action of the Russian government in limiting the stay in Russia of all Jews who intend to attend this proposed ophthalmological congress, a boycott of the congress is seriously proposed. A recent circular sent world-wide to ophthalmological societies runs to this effect; that the Russian minister of the interior has consented to permit the registration of Jewish ophthalmologists at the congress, provided only that in one month in all, they shall enter and be out of Russia. For this purpose, the passports of all members arriving at the frontier will be strictly examined and dated, and all those Jews who fail to leave the country by the 15th of September will be harshly dealt with. This announcement has been received with indignation throughout the realm of ophthalmology, many honorary officials of the congress have handed in their resignations, and the success of the meeting now seems problematical, unless this action against Jewish ophthalmologists, many of whom are leaders in their specialty, is at once annulled. It is now proposed that official protest shall at once take form at the sessions of the various ophthalmological and affiliated societies in this country.

Artificial Drum Heads.

From time immemorial there has always been a demand for some sort of artificial drum head as a substitute for the natural membrana tympani more or less ruined by perforations following acute otitis suppurativa. India rubber and its derivatives in various forms have been foisted at large prices upon the unsuspecting deaf, in spite of a fact that ought to be well known that a bit of absorbent cotton dipped into glycerine, or styrene or similar gelatinous substances and properly applied produces excellent hearing, by a little understanding on the part of the patient. It is now interesting to note from a paper by Guttich in Passow's "Archiv," a fresh attempt to improve the hearing

in cases of perforation by dipping absorbent cotton of proper size into paraffine and then placing in the orifice of the perforation. The results in several instances in which the entire drum head had been removed in the so-called radical mastoid operation were very good for conversation. Musically high tones were not much improved, but lower tones and those which correspond to the octave in which the human voice is placed, were very well perceived. The new method should be cultivated by progressive aurists.

Three Successful Operations for Perforating Ulcers in Typhoid.

Dr. A. B. Mitchell of Belfast, Ireland, has lately reported in the British Medical Journal, three successful instances of this rarely successful operation. In one instance, on the fortieth day of the fever, an ulcer was found near the ileo-cæcal valve, and near by, three others. All were tied with a continuous suture. The second case had symptoms on the twenty-first day and the perforation was found in the ileum and sutured. In the third patient, perforation occurred on the twenty-ninth day, and was found near the ileo-cæcal valve. All of these patients made rapid recovery.

In Dr. Mitchell's opinion, the operation should be performed rapidly, the intestines handled but slightly, a hunt should be made for the ileo-cæcal valve, and then the ileum should be traced upward for a short distance when the seat of the perforation will always be found nearby. The sutures should be of catgut, boiled in alcohol, and stored in tincture of iodine 10% in proof spirits. Saline injections should follow the operation and the patient kept reasonably long in the so-called Fowlers position.

MEDICAL NOTES.

Nystagmus. A New Use for the Kinemetograph.

The oscillations of the eyes which are often so rapid in nystagmus as not to be accurately perceptible or measurable to the human eye can now be studied scientifically and precisely by taking kinemetograph pictures of eyes affected with this curious disease.

Enormous Retention of Fæces.

An insane patient in the Montrose Hospital had long been suffering from obscure symptoms and on removing her to a different ward, she was weighed and then after repeated doses of salines, she was after long efforts relieved of so enormous a mass of retained fæces, that her weight was again taken, and it showed a reduction of over thirteen pounds.

New and Non-official Remedies.

Since publication of New and Non-official Remedies, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Non-official Remedies."

Digipoten; Slee's Antistreptococic Serum (Jour. A. M. A., Dec. 6 and 20, 1913); Slee's Antimenigitis* Serum. N. N. R., 1913. The Abbott Alkoidal Co., Chicago.

Tannigen Tablets, N. N. R., 1913. The Bayer Co., New York City.

Bordet-Gengou Bacillus Vaccine for Whooping-cough Prophylaxis; Bordet-Gengou Bacillus Vaccine for Whooping-cough Therapy. (Jour. A. M. A., Dec. 13, 1913.) Greeley Laboratories, Inc., New York City.

Culture of Bacillus Bulgaricus, Fairchild. (Jour. A. M. A., Dec. 13, 1913). Fairchild Bros. & Foster, New York.

Since Dec. 1, the following articles have been accepted for inclusion with New and Non-official Remedies:—

THE BAYER COMPANY, INC. Elarson: Elarson tablets.

HYNISON, WESTCOTT & Co. Sterile Ampoules of Mercury Salicylate; Salvarsan—"606"—Ehrlich Suspension in Ampoules; Neo-salvarsan, Ehrlich, Suspension in Ampoules.

MALLINCKRODT CHEMICAL WORKS. Sodium Acid Phosphate.

PARKE, DAVIS & Co. Emetine Hydrochloride Ampoules.

POWERS - WEIGHTMAN - ROSENGARTEN Co. Sodium Acid Phosphate.

RADIUM CHEMICAL CO. Radium Chloride; Radium Sulphate.

Change of Title:—Fairchild Bros. & Foster. The manufacturer having changed the name Essence of Pepsin, Fairchild to Pepsencia, the Council directed that the corresponding change of title be made in New and Non-official Remedies.

Articles Omitted from N. N. R.—Armour & Co. Having been withdrawn from the market, the Council voted that Glycerole Trypsin, Armour, be omitted from New and Non-official Remedies. Pitman-Myers Co.—Having voted not to accept papain for inclusion with New and Non-official Remedies, the Council voted to omit the Aromatic Cordial, P. M. Co. from the appendix to New and Non-official Remedies.

Sanatogen. — The fundamental objection to Sanatogen is not its outrageously high price, but the attempt to ascribe to a mixture of casein and glycerophosphate powers not possessed by these ingredients. The claim that Sanatogen is a "nerve food" is an absurdity as is any claim that the casein in Sanatogen has a greater food value than the casein in ordinary milk. Physicians who have given fulsome puffs for Sanatogen are invited to study the claims which are made for it — the following being one " . . . it revivifies the nerves, promoting sleep and helping digestion. . . ." (Jour. A. M. A., Dec. 6, 1913.)

Colloidal Palladium. — A preparation of colloidal palladium, under the proprietary name Leptynol, is proposed as a means of causing the absorption of adipose tissue. The preparation appears as one of the many thousand proprietaries produced abroad in the past year and put on the market after meager experimental work. (Jour. A. M. A., Dec., 1913.)

Dowd's Phosphatometer. — According to its inventor, this is a device "for taking the phosphatic index or pulse of the nervous system." Its originator, Dr. J. Henry Dowd, Buffalo, N. Y., writes enthusiastically of his instrument and of "Comp. Phosphorus Tonic." The phosphatometer is a scientific absurdity which pretends to determine the amount of phosphate in the urine and thus to measure "nerve Metabolism." (Jour. A. M. A., Dec. 20, 1913.)

Pa-Pay-Ans (Bell). — An analysis, included with the report of the Council on Pharmacy and Chemistry rejecting the product, failed to find one of the constituents claimed to be present in the preparation — the constituent after which the medicine appears to have been named, namely pepsin. (Jour. A. M. A., Dec. 27, 1913.)

MEDICAL NOTES.

Fibrolysin in Dupuytren's Contractures.

We lately mentioned the asserted benefits of fibrolysin plasters in various cicatricial formations after burns, injuries, or operations and we now call attention to the utilization of Fibrolysin plasters in those obstinate contractions of the fingers, first mentioned by Dupuytren, the eminent French surgeon, and which have so long borne his honored and famous name. Anything that will permanently relieve this deforming and disagreeable condition of the hands will be widely welcomed in the domain of modern surgery.

Review of Current Literature.

Medical Notes.

The British Medical Journal for November 22 contains two important papers on syphilis, written respectively by two army surgeons, Lt. Col. Gibbard and Major Harrison, and by a navy surgeon, Dr. G. B. Scott. The material on which the papers are based was drawn from military and naval hospitals in Great Britain. The greatest advance in syphilis is in the early diagnosis by microscopic examination of the exudate from the sore. The symptoms of syphilis have been increased by the Wasserman reaction, and the slow progress of mercurialization has given way to the more rapid and surer one of salvarsan.

Great emphasis is laid on the early microscopical diagnosis, which has become a positive duty on the part of every physician. Even if a blood test is decided upon (without the use of the microscope) it may be negative. In the microscope, we have the ultimatum of scientific diagnosis. Do it at the first visit, and in the opinion of the army surgeons, the dark ground illuminations are the only sure chance for discovering the germs.

It is now a routine in the army to make repeated microscopic examinations, and so far as the blood reaction is concerned, the ideal treatment ought to have been begun before the blood reaction is of diagnostic value. The place of the blood test is in the following of the progress of the case.

Salvarsan and Neo Salvarsan have both been used but Neo Salvarsan is not stable in the tropics or in very hot weather, and so loses its value. The value of salvarsan over mercurials lies in the fact that after mercurials 83% relapsed, whilst after salvarsan only 4% so acted.

The rare fatalities of salvarsan are referred to too early repetition of the dose. These army writers had used salvarsan 3,800 times without any fatality. The best combination so far discovered for utilizing salvarsan and mercurials is to give one intravenous injection of salvarsan in a 0.6 dose, to follow it with five, once a week, in unctions of mercurial cream, then a second intravenous salvarsan; then five more inunctions, and last of all an intravenous salvarsan.

The immense boon to humanity in salvarsan is that it remains in the hands of the surgeons, so that in their need of farther treatment by salvarsan, the syphilitics are obliged to report and thus to obtain repeated blood tests, and microscopic examinations if needed.

The navy surgeon in his paper also emphasizes the need of the microscopic examination, and only considers the blood test as a side issue. With early discovery of spirochaete and salvarsan treatment 99% of syphilitic cases can be rapidly cured. If we wait for the blood test and then use salvarsan, we get only 50% of cures, whilst the remaining 50% will need years of treatment. The Chinese ink method and dark illumination are both utilized microscopically in the navy.

The fatal cases following salvarsan are gone into with full detail, and are ascribed to accumulation, anaphylaxis, damage to the renal epithelium producing uraemia, epileptic manifestations occurring before salvarsan was used, hereditary tendency and over stimulation of the spirochaete. In some cases after using salvarsan, experiments have been made with urinalysis and Marsh's test for arsenic. The general methods of combining salvarsan and mercurials follow those advanced by the army surgeons.

A large portion of the issue of this same Journal for November 22 is taken up with the report of the section of bacteriology and pathology of the last International Medical Congress at London, beginning with papers on anaphylaxis, which as the author remarks, was foreshadowed by Jenner a century ago and more. The list of papers here published does not loan itself to abbreviation, and those interested will find in perusal of the report, rich food for thought. One exceedingly interesting paper deals with the empusa of the common fly as an intestinal organism likely to spread infection. Empusa is a parasitic fungus, and the microscopic pictures appended to the paper elucidate the ingenious theories set up by the writer.

We note with interest that the editorials of the foreign journals generally follow the trend of thought suggested by the papers chosen by the editors to open each issue of the magazine.

Amongst the correspondence, we observe that there are frequent discussions of the craze for appendicectomy, and of forcible feeding of the suffragettes. Concerning this alleged outrage on humanity, as often called, we find physicians steadily insisting that forced feeding is done only to prolong life, that it is done without force and that it is only the determined resistance, for political effect, which ever loans to the procedure the least appearance of force against defenceless women.

J. A. S.

You want a larger and better journal

**YOU CAN HAVE IT BY WRIT-
ING OUR ADVERTISERS: "I
SAW YOUR AD. IN OUR STATE
JOURNAL."**

FAVOR THOSE WHO FAVOR US

Journal A. M. A., Dec. 6, 1913.

Shock.

Dr. George G. Crille of Cleveland, considered by many the greatest living authority on shock, has presented what he calls the kinetic theory of shock "based on the phenomena and consequences of the transformation of latent energy into kinetic energy, as an adaptive response to environmental stimuli." He includes traumatic, emotional, toxic and foreign proteid and drug forms, in their acute and chronic stages, and their probable relations to certain diseases, as indigestion, neurasthenia, glycosuria, Graves' disease, cardiovascular disease and nephritis.

His principal conclusion is that "all forms of shock are caused by overstimulation and consequent exhaustion" with possible degeneration in the kinetic system, which includes the brain, thyroid, adrenals and muscles. These organs are called the kinetic system because "in response to environmental stimuli of any sort, they convert latent energy into motion or heat."

Experimentally, physical injury alone inflicted on dogs under anaesthesia causes characteristic changes in the brain—first of hyperactivity, then exhaustion, finally disintegration. "Under nitrous oxid the brain cell changes are about one-third as much as under either after equal trauma." "When the vitality is previously reduced by emotion, by physical exertion, by toxins, by infection, by excessive thyroid feeding, or by adrenalectomy—greater changes are found after equal trauma."

Under anaesthesia, shock producing trauma causes no increase in epinephrin output nor have any changes in the thyroid been observed. Thus he concludes that "ether anaesthesia offers no protection to the brain cells from the effect of trauma," that it "breaks the arc causing consciousness beyond the brain cells, somewhere in the efferent path; hence, afferent stimuli reach and modify the brain cells as readily as if no anaesthetic had been given"—the cell changes being "due to the discharge of energy in a futile effort to escape from the injury."

The emotional stimulus of fear causes in rabbits the same changes in brain cells as physical trauma and, if persistent, causes death. Rage causes in cats an increase in epinephrin output but does not after the division of the major and minor splanchnic nerves. "In rabbits nephritis often results from repeated fright."

The histologic changes produced by toxic and foreign proteid shock and by anaphylactic shock are precisely the same as seen in traumatic injury and emotional injury. Also a large increase in

epinephrin output results unless the nerve supply of the adrenals is severed or the animal deeply narcotized by morphia.

The administration of ether, urethane, nitrous oxid or morphia causes no brain cell changes or increased epinephrin output. Strychnine, however, causes the same brain cell changes and increased epinephrin output as do emotions, toxins, and foreign proteids. Briefly then, "all the factors that cause the activation of the kinetic system, whether emotional, toxic, foreign proteid or drug, produce identical brain changes and increased epinephrin output. On the other hand, the anæsthetics and narcotics cause neither brain cell changes nor increased epinephrin output, while strychnine does both." Clinically it is known that those agencies which cause an increased activity of brain and adrenals, also aggravate cases of Graves' disease, thus demonstrating their effect on the thyroid.

Thus the conclusion is that all "shock is a work exhaustion phenomenon." The difference between normal processes and shock is that of intensity, not of kind. Thus the exclusion of both traumatic and emotional stimuli will wholly prevent shock in surgical operations.

Under the stress of overstimulation for a considerable period, some link in the kinetic system will give way. If it be the brain, then neurasthenia, nerve exhaustion, or even insanity may follow. The effect on the thyroid may be the production of Graves' disease. An overstimulated adrenal system may cause cardiovascular disease or glycosuria.

In this hypothesis, we find a reason why cardiovascular disease may be caused by chronic infection, by auto-intoxication or by emotional excitation. "Either acute or chronic shock may be measurably controlled by weakening or breaking the kinetic chain at any point," such as dividing the nerves or reducing the blood supply of the thyroid or adrenals or by blocking stimuli in surgical operations by anoci-association form of anæsthesia.

C. M. R.

(U. S. Naval Medical Bulletin.)

Some Aspects of the Prophylaxis of Typhoid Fever by the Injection of Killed Cultures.

By C. S. BUTLER, SURGEON, U. S. NAVY.

"Much evidence has recently been accumulated to show the prophylactic effect of the so-called vaccination immunity against typhoid infection. Like all matters which are not capable of exact definition, opinions vary widely as to the value of this procedure. It is rated as paramount by some and as practically negligible by others. We find representatives of each opinion among sanitarians and internists on the

one hand and among laboratory workers on the other." The purport of the article seems not to detract from the estimate of value to be placed upon prophylactic injections of killed cultures but to bring out the enhanced apparent value of these by the improved methods of camp sanitation. This point seems to be of value in considering the question as applied to civil life, for it is to the men of the Medical Corps of our Army and Navy (especially the army) that the credit is due for pioneer work and comprehensive statistics of same in the prophylaxis of typhoid by injections of killed cultures. This has been partly true at least from force of circumstances for compulsory vaccination and immediate and direct control of all patients vaccinated and unvaccinated can rarely be accomplished by the practitioner in civil life.

The figures given in the article are most convincing if viewed in the light that the results were wholly due to prophylactic injections. A comparative list was taken of a given number of men in camp at Jacksonville, Fla., during the Spanish war in 1898, and a little larger number in Manœver camp, at San Antonio, Texas, in 1911. It will be readily seen that climatic conditions must have resembled each other as nearly as possible as the two camps were in nearly the same latitude. Full quotations are not attempted in this review but out of a camp containing 9 regiments of infantry, 10,759 men, there were diagnosed by the officers of the medical corps as *certain* and *probable* 2,695 cases of typhoid fever. From that number there were 248 deaths. This was at Jacksonville, Fla., in 1898.

At San Antonio, Texas, in 1911 in a camp of 12,801 men, comprising infantry, cavalry, artillery, engineer signal and sanitary troops, there was diagnosed as *certain* and *probable* one case of typhoid fever and this case recovered. Quite a remarkable difference in the two records. Now the question arises, was this entirely due to prophylactic vaccination? Even the most skeptical must give a large amount of credit to prophylactic injections which were carried out systematically in the later camp. The writer of the article says: "It is not the purpose of this article to belittle the value of the vaccination form of prophylaxis, because as intimated, I believe implicitly in its preventative power. But rather is it my purpose to point out that in our zeal to give vaccination due credit, we may do injustice to our good friend, camp hygiene."

It is to be remembered in reading such a comparison of figures based upon results obtained in two camps of comparatively recent dates, that vastly different conditions prevailed in San Antonio, 1911, than in Jacksonville, 1898, other than the mere fact of compulsory prophylactic injections given the men. It is with regret that we are

obliged to record the woeful inefficiency of the Medical Corps of our army in 1898. This was not entirely due (and perhaps in a very small part) to the character of the medical officers or perhaps to their *desired* methods. But they were hampered at every turn by the lack of necessary supplies, money, and means to work with, which should have been held in readiness by our government. Much might be said in this connection in reply to the arguments of those who are constantly decrying the efforts of our standing army and National Guard but that is not within the province of this article.

While not wishing to detract from the apparently wonderful results seemingly due to prophylactic injections, several other features are brought forward to be borne in mind, such as difference in the personnel of the two forces, one being made up of volunteers free from civil life and some perhaps carriers of typhoid, while the others were regular army men under the supervision of the Medical Corps, the concentration in 1911 of the attention of the whole medical corps upon the diagnosis and prevention of typhoid, the vast and never-to-be-forgotten lessons learned by the medical corps from the example of 1898, and last but not least the sweeping changes in methods of camp sanitation with the power of *enforcement* in the hands of the men of the medical corps in 1911, a thing not possible according to regulation existing in 1898. As an example that forces other than that of vaccination were at least partially responsible for the magnificent reduction of typhoid, it is mentioned that in 1898 there were hundreds of cases classified as diarrhoeal and dysenteric while in the Texas camp there were 19. Vaccination could not have influenced these but it is permissible to conclude that their absence from the Texas camp was a measure of the adequacy of the general sanitary methods employed.

Following his discussion of the military side of the question the author enters upon a very able presentation of the matter of immunity. The varied phases of the disease, the question of relapse and of the carrier state all serve to convince us that in the immunity of typhoid fever we are dealing with a complex question. All organisms do not react to the same degree in response to the same stimulus. One patient can not generate enough anti-toxic substance to neutralize his poison and hence dies of toxemia. While another neutralizes the poison with such facility that we must exercise great care in diagnosis to determine that he really has typhoid. If nature unaided works in this varied manner in different individuals it must be true in the same degree in cases immunized by vaccine. At present there is no known way of determining how long the immunity in an effective degree persists after it is produced. Owing to the complexity of the question

of immunity all clinical and laboratory methods of determining or even estimating the degree of the immunity are at present unsatisfactory. The opsonic index, even when determined, is of no great value as it is only one factor in the complex question of immunity. Some of the worst reactions seen after the use of the vaccine came in persons who had previously had typhoid.

The remainder of the paper is taken up by a description of the method of preparing the vaccine employed by the men of the army and navy. A full description is entirely beyond the sphere of this review and only the extra precaution of inoculating a culture tube from the vaccine as it is being bottled or put in ampules is to be noted. This "control" is incubated over night and must be absolutely sterile on the following morning or the entire amount of vaccine is discarded. To test the toxivity 2 c. c. of the vaccine is inoculated into each of two rabbits and two guinea pigs. The test of toxicity and the standard conditions of growth of the vaccine are relied upon to give a standard dosage. This may sound like a loose method of standardization, but no counting of killed bacilli would be of assistance as the man to be inoculated cannot be standardized and one may get more reaction from 0.5 of a c. c. than another would from 2 c. c.

In conclusion of the view it may be said, though that is superfluous, that much may be gained by those of us in civil life if we study a little more closely some of the "clean cut" methods of our brother practitioners in the service of "Uncle Sam."

O. E. H.

Book Reviews.

Progressive Medicine.

A quarterly digest of advances, discoveries and improvements in the Medical and Surgical Sciences. Sept. 1, 1913. Lea & Febiger, Philadelphia and New York. Vol. XV, No. 3. \$6.00 per annum.

This magazine is well named, inasmuch as it is a record of progress in the medical sciences.

The present number contains departments devoted to diseases of the thorax and its viscera; dermatology and syphilis; obstetrics; and diseases of the nervous system.

Where so much is good it is difficult to particularize, but an idea of the quality of the observations can be had from the following ab-

tract of the relation between heart disorders and the gastro-intestinal brace.

"Fermentation and flatulence give rise to displacement of the heart. The inflated stomach pushes up the left diaphragm, and tilts up the apex and the heart into a more horizontal axis. This causes kinking of the great vessels at the base. Both emptying and filling are considerably impeded, as proved experimentally by Henderson's cardiometer attached to the exposed heart; any displacement of the apex either upward or downward causes a marked fall in the arterial, together with a rise in the venous pressure, etc."

C. R. B.

Case Histories in Pediatrics.

By John Lovett Morse, Associate Professor of Pediatrics, Harvard Medical School. W. M. Leonard, Publisher. Price, \$5.50.

The second edition of this work contains a series of two hundred case histories, double the number included in the first edition.

A preliminary chapter devoted to "The Normal Development and Physical Examination of the Child," presents valuable data for the comparison of variations that occur in disease.

This method of instruction has proven itself of value in teaching undergraduate medical students as it gives the entire course of the disease and a positive diagnosis.

The book commends itself to physicians for the following reasons:

It presents two hundred carefully selected cases, each calculated to bring out one or more important points in pediatrics.

It reveals the methods used by a special worker in the field of pediatrics in presenting the essential points in the history of a case, in the physical examination of the child, the laboratory procedures employed and the difficulties encountered in differential diagnosis.

It sums up the case concisely, gives a prognosis and presents the treatment adopted.

The index is so arranged that one wishing to refer to a certain group of cases may do so without difficulty.

It enables one to take a post graduate course that is worth while without loss of time and practically no expense.

H. E. M.

PHYSICIAN WANTED, to take an old established practice in a pleasant village on line of electric railroad. No competition within six miles. Good school privileges and convenient to church. Collections first-class. Residence for sale on easy terms or will rent the same. For further information address,

I. W. GILBERT, M. D., LITCHFIELD, MAINE

County News.

CUMBERLAND.

PORTLAND MEDICAL CLUB.

The first meeting of 1914 was held at the Columbia Hotel on January eighth, with the second vice-president, Dr. F. Y. Gilbert, in the chair. Twenty-nine members were present.

Dr. B. H. Mason was unanimously elected to membership in the club.

The annual report of the treasurer for 1913 was read and accepted.

Dr. J. A. Spalding presented a rare picture of Dr. Peter Quassy, for whom the drug quassia was named, and gave a brief but very interesting history of the man.

The paper of the evening was by Dr. Henry M. Swift, his subject being "Some Phases of Mental Disease of Importance to the General Practitioner." The three main points discussed were the early diagnosis of general paralysis, the differential diagnosis of recurrent melancholia and general depression from neurasthenia, and the diagnosis of alcoholic insanity. These were set forth in a lucid manner, and the paper was ably discussed by Drs. Swasey, Dunn, Marshall, Northcott, Mason and Milliken.

Dr. Marshall brought up the question of decreased blood-pressure in incipient tuberculosis, and asked that the members of the club observe in future if their findings agree with his in such cases.

R. B. MOORE, *Secretary*.

AROOSTOOK.

Aroostook County Medical Society held its regular semi-annual meeting, in the Court House, at Caribou, on Tuesday, Jan. 20th.

Four new members were added to the roll and much business of importance was transacted.

Dr. T. S. Dickison of Houlton was elected president for the year 1914.

Papers were read as follows: "Infant Feeding," Dr. F. W. Tarbell, Smyrna; "Broncho-pneumonia in Children," Dr. A. H. Damon, Limestone; "Conservation of Vision," Dr. F. W. Mitchell, Houlton.

Twenty-two members were present, and the free discussion of the various papers, and reports of cases, manifested more than an ordinary amount of interest and enthusiasm.

It was decided to hold the semi-annual meeting on the second Tuesday in October instead of January as heretofore.

Death has removed one of our worthy members since last meeting, Dr. L. P. LaFleche of Caribou.

W. G. CHAMBERLAIN, *County Editor*.

FRANKLIN.

The Franklin County Medical Society held its annual meeting in Farmington, December 17, 1913. The following officers were elected for 1914: President — W. J. Trefethen of Wilton; vice president — O. B. Head of New Sharon; secretary and treasurer — G. L. Pratt of Farmington; censor for three years — J. W. Nichols of Farmington; delegate to Maine Medical Association — B. F. Makepeace of Farmington. Dr. Harold S. Pratt of Farmington was elected to membership.

Four of our members have left the county during the year: Dr. Blanchard of Phillips going to Pennsylvania, Dr. Hopkins of New Portland going to Bingham, Me., Dr. D. M. Presson going to Augusta, Me., and Dr. E. L. Pennell of Kingfield going to Auburn, Me.

Two doctors have come into the county during the year, Dr. O. W. Simmons to Kingfield and Dr. H. S. Pratt to Farmington.

G. L. PRATT, *County Editor*.

PISCATAQUIS.

The annual meeting of the Piscataquis County Medical Society was held in the law library of the Court House, Dover, Thursday evening, Jan. 15, 1914. The following officers were elected for 1914; president — C. C. Hall, Jr., Foxcroft; vice president — E. T. Flint, Foxcroft; Secretary — G. E. Dore, Guilford; treasurer — E. D. Merrill, Foxcroft; delegate to Maine Medical Association — J. H. Wilson, Cambridge; member of Board of Censors for three years — R. H. Marsh, Guilford; member of legislative committee — E. D. Merrill, Foxcroft.

A paper was read by Dr. G. M. Woodcock of Bangor on "Some Medical Points." The paper was very interesting and practical and brought forth much discussion on various practical medical subjects.

C. C. HALL, JR., *County Editor*.

PENOBSCOT.

The January meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday evening, Jan. 30th, Dr. B. L. Bryant, the President, presiding.

There was a large attendance, thirty-one members being present besides the speaker of the evening, Dr. Ernest B. Young of Boston and Dr. Frank Y. Gilbert of Portland.

The application for membership of Dr. Willis L. Hasty of Hampden was reported on favorably by the Board of Censors and he was voted into the association.

The names of Drs. A. E. Small of Bangor, and L. M. Pastor of Bangor were presented and referred to the Board of Censors.

Dr. Ernest B. Young of Boston gave us a most interesting paper on "Neisser Infection of the Female Reproductive Organs in Relation to Pregnancy."

The following resolutions were passed:

Resolved, That, as members of the medical profession of Maine, we hereby express our emphatic disapproval of the treatment accorded Dr. Miller, late superintendent of the Augusta State hospital.

To discharge a public official for lack of professional or executive ability would be a proper and consistent procedure; but to summarily remove a man from office who by the testimony of those having the power of removal had performed the duties for which he was elected with exceptional ability and faithfulness, because he could not work in "harmony" with certain officials who disagreed with him about matters for which he was held responsible, seems to us such an unusual, uncalled for and unjust procedure as to demand in justice to a worthy member of the profession, a strong and earnest protest from the medical profession of the State.

Resolved, That we approve of the stand taken in this matter by our professional colleague, Dr. S. C. Gordon, and we believe that if his opinion and advice had been followed, this act of injustice toward Dr. Miller would not have been consummated, and the medical profession of the State would have been spared this humiliating spectacle and the State itself saved from a grave public scandal.

J. B. THOMPSON.

YORK.

The 75th quarterly session of the York County Medical Society was held in the common council room, Biddeford City Building, Wednesday, Jan. 7th. The meeting was called to order at 11.30 a. m. by Dr. L. E. Willard, Saco, president of the society. The minutes of the October meeting were read and approved.

Drs. Chas. E. Cook, So. Berwick, Arthur Lamoureux, Sanford, and Wm. W. Varrell, York Harbor, were elected members.

Dr. Hugh D. Grant, formerly of Bowdoinham, now residing in Rochester, N. H., was granted leave to apply for a New Hampshire interstate reciprocity certificate.

The reports of the secretary and treasurer were read and accepted. The treasurer's report follows:

Jan. 1, 1913, cash in treasury,	\$120.12
Received to Dec. 31, 1913,	246.00
	<hr/>
	\$366.12
Expended to Dec. 31, 1913,	330.66
	<hr/>
Balance on hand, Jan. 1, 1914,	\$ 35.46

The committee on nominations, appointed by the president, were Drs. Doloff, Biddeford; Thompson and Haley, Saco. They reported for the following officers who were elected: president—Dr. Jas. W. Gordon, Ogunquit; vice president—Dr. James M. O'Connor, Biddeford; secretary—Dr. Arthur L. Jones, Old Orchard; treasurer—Dr. Chas. F. Traynor, Biddeford; censor for three years—Dr. Chas. W. Blagdon, Sanford; delegates for two years to Maine Medical Association—Drs. J. D. Haley, Saco; C. F. Kendall, Biddeford, and J. L. M. Willis, Eliot.

The subject of osteopathy was presented and discussed by several members. On motion of Dr. Cochrane, Saco, seconded by Drs. O'Connor, Biddeford, and Cook, York Village, it was voted that it is the sense of this meeting that the osteopaths shall have one member on the State board of medical registration and that whatever action the legislative committee of the State Association may take will be satisfactory to this society.

There was a brief discussion in regard to the work of anti-tuberculosis societies, but no definite action was taken. The question of contract practice received a little consideration when adjournment for dinner at Hotel Thatcher was voted.

At the afternoon session, Dr. Gordon, the newly elected president, presided. He appointed as the committee on public health and legislation, to serve for the present year, Drs. Cochrane and Willard, Saco, and Doloff, Biddeford.

Drs. Wm. L. Cousins of St. Barnabas Hospital, Portland, and Frank Y. Gilbert, editor of the Journal of the Maine Medical Association, Portland, were guests of the Society. Dr. Cousins read a paper, "The Necessity of Making an Early Diagnosis." The subject was presented in an especially entertaining and illuminating manner, so that the attention of all the members was held throughout and a general discussion of much profit ensued.

Dr. Gilbert spoke of programs that should make the county society meetings in Maine more attractive and valuable, and outlined plans for starting a tri-State medical journal.

Altogether it was one of the best meetings ever held by this society. A rising vote of thanks was extended to Drs. Cousins and Gilbert. Meeting adjourned.

There were present — Drs. W. L. Cousins and Gilbert, Portland; M. H. Ferguson, C. J. Emery, F. L. Davis, J. M. O'Connor, F. E. Small, C. F. Kendall, D. E. Doloff, C. F. Traynor, L. A. Girard, G. C. Precourt, A. C. Maynard, Biddeford; J. D. Cochrane, C. W. Pillsbury, J. D. Haley, L. E. Willard, C. E. Thompson, L. L. Powell, Laura B. Stickney, R. L. Maybury, Saco; J. C. McCorrison, North Berwick; C. E. Lander, Alfred; E. C. Cook, York Village; H. L. Prescott, Kennebunkport; J. K. L'Heureux, A. Lamoureux, Sanford; L. W. Parady, Springvale; J. W. Gordon, Ogunquit; B. F. Wentworth, Scarboro; J. A. Randall, A. L. Jones, Old Orchard. Total, 32.

A. L. JONES, *County Editor.*

**It
offends
no palate.**

Hydroleine
is exception-
ally diges-
tible.

Hydroleine

Made from pure Norwegian
cod-liver oil, emulsified
after a scientific formula
by approved processes.

Hydroleine
has received
the approval
of physicians
because — thor-
oughly dependable, without
medicinal admixture—it
can be used in *every* case in
which cod-liver oil is indi-
cated. Sold by druggists.

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York
Sample will be sent to physicians on request.

Personal News and Notes.

Dr. H. A. Wood of Congress St., west, Portland, who recently underwent a severe operation, is now rapidly recovering, much to the delight of many friends.

Dr. G. M. Woodcock of Bangor has been nominated a member of the State Board of Health.

Dr. W. Bean Moulton of Portland has removed his office to the Trelawny Building, 655 Congress St.

Dr. C. C. Hall of Dover, with his wife and daughter, are spending the winter at Daytona Beach, Florida.

Dr. Hiram Hunt of Greenville leaves next month for Florida for several months' stay.

The new United States pension board of York County met, early in January, at the office of Dr. S. B. Marshall in Alfred and organized by the choice of Dr. A. G. Wiley of Buxton (Bar Mills) as chairman, Dr. S. B. Marshall of Alfred as secretary and Dr. R. S. Gove of Sanford as treasurer.

Dr. A. G. Wiley, who has had a prolonged illness, has resumed his practice in Bar Mills.

Dr. W. C. Blagdon of Sanford has been appointed on the staff of the Webber Hospital, Biddeford.

Miss Frances C. Matthews, superintendent of the Webber Hospital, Biddeford, has resigned to take a fine position at Columbus, Ohio, where she goes to take charge of the Ohio General Hospital. The Ohio Hospital has 100 beds. Miss Matthews leaves Biddeford, March 7.

Drs. F. E. Small and P. S. Hill, Biddeford, and R. L. Maybury, Saco, have received appointments, recently, as members of the United States pension board.

Dr. Wm. H. Baker, M. M. S., 1901, formerly in practice in Linneus, Danforth and No. Fryeburg, Maine, has located, recently, in West Buxton, and will occupy the Thos. Bradbury house in Hollis.

Dr. and Mrs. E. D. O'Neill of Biddeford have made arrangements to go abroad in the near future. They will be away for about five weeks.

"Daughters of Hygeia of York County" is the name of a new organization formed by the wives of the members of the York County Medical Society. The plan of forming such an association was outlined at the meeting of the York County Medical Society at Cape Por-

poise last June, and on Wednesday, Jan. 7th, in Biddeford, the organization was made permanent, a constitution and by-laws adopted, officers elected and committees appointed. Much interest and enthusiasm have been aroused in this unique society started by the wives of York County physicians and undoubtedly it will prove to be beneficial in many ways. It is likely that other similar organizations will be formed in other counties in Maine.

The members of the board of hospital trustees recently appointed by Governor Haines and whose nominations were confirmed at the sessions of the Governor and council yesterday, organized today with Hartley C. Baxter of Brunswick as president, and Albert J. Stearns of Norway as secretary.

The trustees voted that Dr. Forrest B. Tyson, assistant superintendent of the Bangor State Hospital, should take charge of the Augusta institution for the present as acting superintendent. It is understood that the board wishes to look the situation over before making a permanent appointment. Some people believe that Dr. Tyson will eventually be selected as superintendent. Dr. Tyson was born in Adrian, Mich., 32 years ago and was graduated from Tufts medical school in 1905. He then served as an interne at the Massachusetts State hospital until 1907, when he accepted a position at the Bangor State Hospital, where he has since remained, most of the time as assistant superintendent. He is said to be a careful student of modern methods dealing with the insane. He is married and has two children.

Three of the five members of the medical staff, Dr. Stephen E. Vosberg, Dr. John J. Twomey and Dr. Anita Wilson, presented their resignation to the board of trustees, to take effect not later than March 1. This leaves Dr. Sturgis and Dr. Hall as assistants to Dr. Tyson. Dr. Vosberg has accepted a position in a hospital in Massachusetts.

The Waterville Clinical Society met January 19 at the City Hall. Dr. Estes Nichols of Hebron was present and discussed the subject of tuberculosis.

Dr. Clement P. Wescott has opened a sanatorium for the care and treatment of nervous affections, convalescents, and general invalidism, at Woodfords, Me.

The first lecture on this important topic, "Conservation of Vision," delivered in Maine was given by Dr. F. W. Mitchell of Houlton, at the monthly meeting of the Aroostook County Medical Society at Caribou, January 20. The lecture was repeated at the quarterly meeting of the Teachers of Aroostook County, at Presque Isle on the 22d. We wish the enterprise every success and trust that similar lectures may be delivered throughout the State during the approaching spring.

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested to do so.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors

VOL. IV.

MAR., 1914.

No. 8

THE ANTITOXIC FUNCTIONS OF THE THYROID IN THE PATHOGENESIS AND TREATMENT OF GOITER.*

BY CHARLES E. DE M. SAJOUS, M. D., LL. D., PHILADELPHIA.

Although what has been termed "detoxicatory" functions have been ascribed to the thyroid gland, the relationship that this function might have with the pathogenesis of goiter has escaped attention. Authors are in accord as to the fact that the disease is due to some form of intoxication, whether the still obscure agent be calcium, some other water-borne inorganic poison, a bacterial toxin, etc. Such being the case, we have reasonable ground for the belief, in keeping with the teachings of modern research, that this poison excites in the body a defensive reaction. If the line of reasoning submitted in this paper is correct, therefore, we must add to our present conception of the pathogenesis of goiter the postulate that the causative agent in a given case acts by awakening, in the thyroid gland and its accessory parathyroid glandules, a reaction having for its purpose the destruction of that pathogenic agent.

This involves, first of all, the necessity of showing that the thyroid apparatus — by which I mean the thyroid and parathyroids — is capable of carrying on such functions. The fact that these organs jointly destroy certain poisons has long been known. Some authors held that the antitoxic process occurred in the gland itself; others that it was effected by means of a secretion or secretions contributed by the organs to the blood, the antitoxic process being carried on in the blood

*Read by invitation before the Cumberland County, Me., Medical Society, December 19, 1913.

itself. The bulk of evidence soon showed, however, that the latter process was the true one. Striking in this connection is the fact that while removal of the thyroid and parathyroids produces tetany, now known to be due to the accumulation of certain organic poisons in the blood, the administration of these glands or grafting counteracts at least for a time the morbid effects of the operation. That the organs had for their functions to destroy these organic poisons is therefore evident. The identity of the poisons thus destroyed is suggested by the fact that the paroxysms are far more severe when the experimental animal is fed meat than when a milk diet is adhered to. Moreover, the blood of thyroidectomized animals has been shown to be toxic to other animals. On the whole, we should, as I urged eleven years ago, ascribe to the thyroid both metabolic and antitoxic functions. Swale Vincent wrote recently: "The most usually accepted theory is that the thyroid manufactures an internal secretion which is essential to the proper growth and normal metabolic functions of the whole body," and, furthermore, that "this may easily and reasonably be combined with the antitoxic theory. It may be supposed," adds this author, "that the function of the internal secretion is to prevent poisoning by the products of body metabolism or by infections from without." He further summarizes much evidence, that I will spare you, by the remark that "the extreme liability of thyroidectomized animals to various infective conditions is strong evidence in support of this view." My own contributions to this idea will be submitted later.

When I ask you to associate this antitoxic function with goiter, it becomes necessary, however, to account for the enlargement of the thyroid gland which constitutes this disease. Here, we must not lose sight of the fact that many varieties of goitrous enlargement are recognized, precisely as the heart is subject to enlargement from many different causes. We consider cardiac enlargement as a mere symptom, whereas in the case of goiter we give the same enlargement the predominating role, slighting the many other features of morbid processes at least as varied as those met with in the heart. Again, we overlook the fact that the thyroparathyroid apparatus, like all other organs, is subject to many widely different organic disorders. Just as carcinoma, sarcoma, fibroma, cyst, angioma, degeneration, hypertrophy, and other familiar morbid changes occur in the heart muscle, so do we have a correspondingly great number of pathological conditions in the thyroid apparatus. The symptom-complex of each of these must be as clearly identified, therefore, as any heart disease, in order that it may be treated intelligently and disappearance of the growth caused—if the morbid changes in the organ are not sufficiently advanced to defeat all efforts in that direction.

The surgical removal of a goiter is not a cure for goiter; it means the removal of a once useful organ which has been permitted, through neglect, to reach a condition of invalidism, partial or complete. Worse even than an amputated leg — which, by the way, does not mean a cured leg, but a buried leg — loss of the thyroid may mean, particularly in children, deterioration of the entire organism, including the organ of mind. So utterly oblivious are writers in this direction that some text-books of medicine do not even refer to goiter, leaving it entirely to surgeons to describe the disease from their viewpoint, which reduces itself to descriptions of the pathology of fully developed growths, their physical characteristics, the pressure symptoms, and the surgical procedures indicated. Of their pathogenesis, that is to say, the relations between cause and effect, nothing; of the relations between the growth and bodily functions, nothing; of the process through which the occurrence of goiter could be prevented, nothing; of the methods by which the functions of the thyroid can be restored to normal limits, nothing. Yet, rightly does the surgeon remain within his sphere; the physician has, so to say, allowed the disease to develop beyond his own reach. And so will it continue, in my opinion, until the physician makes the *functions* of the thyroparathyroid apparatus the basis of his researches on the diseases of these organs, and bases his prophylaxis and treatment on the relations between cause and effect, which means, from my viewpoint, the relations between intoxication, from within or without, and the effort of the thyroparathyroid apparatus to destroy the poison.

We have seen that Swale Vincent, in summarizing our knowledge on what he terms the “antitoxic theory,” refers to the now-established fact that the purpose of the internal secretion of the thyroid — including that of the parathyroids, I would say — is to prevent poisoning by products of metabolism and also, using his own words, “by infections from without,” and that, moreover, thyroidectomized animals show an extreme liability to infective conditions. When to this we add the familiar fact that pregnancy causes enlargement of the thyroid, often sufficient to be detected by palpation and inspection, the evident purpose being to take part at least in the destruction of the excess of wastes and detritus derived from the developing fetus, we must admit that a wide range of action is to be allotted to the thyroparathyroid apparatus.

It was this wide range of action which led me as far back as 1903, in the first edition of my work on the “Internal Secretions,” to connect the thyroid secretions with the processes grouped under the term “immunity.” I then advanced the view: (1) that the secretion of the thyroid (as one of the component organs of what I termed the adrenai

system) was an active factor in the immunizing process; (2) that it took part indirectly in this process by increasing the functional activity of the adrenals and general oxidation and metabolism, and (3) that the resulting increase of functional activity in the organs which produced protective substances correspondingly augmented in the blood the quantity of these substances — then known collectively as Buchners' alexins.

Four years later (1907), these conclusions, including the participation of the thyroid secretion in the general process of immunity, received additional, and what appears to me conclusive, support. Miss Louise Fassin, of the Bacteriological Institute of Liege, summarized a series of investigations in the following words: "The first series of my experiments, in a large number of animals (dogs and rabbits), showed that the subcutaneous injection of thyroid product (fluidextract of the fresh gland) is rapidly followed in the serum by an increase of alexin, a substance discovered by Buchner, generally considered as playing an important role in the defense of the body. This increase becomes evident as early as ten minutes after the injection; it becomes accentuated after one hour, and reaches its maximum in twenty-four hours; then the proportion of alexin in the blood recedes more or less rapidly until the normal is reached. The effects of one injection rarely lasts less than twenty-four hours or more than two or three days." She also found that the oral administration of thyroid brought about corresponding effects. I may recall, moreover, that as shown by Reid Hunt, an overactive thyroid gives rise to an increase of organic iodine in the blood, and that as far back as 1903.* I urged that the antitoxic activity of an antitoxic serum coincided with the proportion of thyroiodine it contained.

To control these results as to their direct relationship with the thyroid, Miss Fassin performed complete thyroidectomy in nine animals. One alone, however, survived the operation more than fifteen days; tetany occurred in all, thus showing that the parathyroids had been completely removed. "In all the animals operated on," she writes, "there occurred a marked diminution of the hemolytic and bactericidal alexin."

While this clearly shows an intimate relationship between the thyroid and the general immunizing process, it does not tell us what the excess of thyroparathyroid secretion represents in the blood. Study of this question led me to conclude in 1907 that it was the constituent which Sir A. E. Wright had termed "opsonin" and which before him Denys and Leclef, Bordet, Nolf, and others had identified as "sensi-

*"Internal Secretions," Vol. 1, p. 762.

tizing substance" or "sensibilisatrice." This view was also confirmed by other investigators. Referring you elsewhere for detailed evidence,† I shall merely submit that Leopold-Levi and H. de Rothschild, of Paris, write in this connection in the second volume of their work on "Physiopathology of the Thyroid Gland": "Sajous has attributed, among the functions of the thyroid body, a role to the latter which he assimilates to that of opsonins and to autoantitoxins. More recently, Miss Fassin, M. Stepanoff, and M. Marbe have confirmed on their side the influence of the thyroid on the blood's asset in alexins and opsonins." Miss Fassin and M. Marbe have done more than this: Since by removing the thyroid body they inhibited the production of opsonins, they also sustained my opinion that the thyroid apparatus is the source of opsonins. Lorand, of Carlsbad, also referring to the confirmation of my views by European investigators, states that this proves further "the intimate relationship between the thyroid and our immunizing functions." Frugoni, moreover, found that thyroid gland markedly raised not only the opsonic index of tuberculous animals, but also the active germicidal power of their blood.

This must suffice to show that the thyroid gland — including always its parathyroids — is intimately connected with the autoprotective or immunizing functions of the body. Such being the case, and knowing that goiter, at least in some of its forms, is due to intoxication from some poison, organic or inorganic, I have also good ground for the belief, in view of the fact that infections, toxic wastes, etc., cause enlargement of the thyroid, that a defensive reaction of that organ accounts for the development of goiter.

While the disease may be the result of prolonged overactivity of the gland, characterized by typical histologic lesions of hyperplasia and hypertrophy, with symptoms of hyperthyroidism, these lesions may also occur in a gland which is unable, even under violent stimulation, to react adequately to the poison. Driven, nevertheless, to inordinate activity, it undergoes violent congestion, thus causing the development of a relatively rapid form of the disease. A description of this form, which has been termed "acute goiter" because it sometimes appears with relative suddenness — though differing totally from true acute goiter due to local congestion — and also "epidemic goiter" because several cases sometimes appear within a short period, will illustrate the difference between this and another form to be presently described.

In the *hyposecretion goiter* — we will thus term it for the sake of convenience — the growth is soft and diffuse and shows a tendency to

†New York Med. Jour., Nov. 11, 1911.

grow larger on one side, usually the right. Although it sometimes recedes of its own accord, its tendency is to persist if the cause be not removed, and to undergo colloid, cystic, or other retrogressive changes. It is a pernicious form in the sense that in the child it tends toward the production of cretinism, and in the adult, to the corresponding condition, myxedema. Now, it is here that a careful study of the general symptoms will reveal the true nature of the trouble, the symptoms being quite characteristic, and typically those of a mild form of hypothyroidism. The pulse is slow, ranging from 62 down to 40 or even lower. This bradycardia is witnessed in all cases. There is a marked tendency to hyperidrosis, especially of the extremities, excessive sweating occurring under slight exertion and sometimes even without it. Hypothermia is habitual, though seldom marked. The urea excretion is reduced one-third. There are no pressure phenomena, unless the growth is far advanced—no dyspnea, no dysphagia. Nor are there nervous symptoms such as those that are common to hyperthyroidia and exophthalmic goiter—no tremor, no exophthalmos. Treated in time with thyroid gland and by removal of the cause, if the latter can be located, these cases recover with relative promptness.

Comparing this hyposecretion form with that due to excessive secretory activity, which we shall term *hypersecretion goiter*, we find none of the landmarks just described. Indeed, as soon as any appear other than the goitrous enlargement, they are clearly those of *larval exophthalmic goiter*—a somewhat rapid pulse, so-called “nervousness,” with tremor so slight, perhaps, that it is revealed only on careful examination. As a rule, however, and in cases seen sufficiently early, there is simple enlargement of the gland without constitutional symptoms. Its shape is not modified at first, and for a time the swelling can only be discerned by palpation, and perhaps by careful inspection during deep respiration, deglutition, and coughing, which greatly accentuate the up and down motion of the gland. There are no symptoms due to pressure at this stage.

Returning to the hyposecretion goiter, it is the form which, as Kocher states, “is not usually brought to the surgeon for treatment because it can be cured by internal medication.” It is the type known here as “parenchymatous goiter.” This type, as Adami writes, “would seem to be an overgrowth of the gland with overactivity, although such overgrowth may eventually give rise to atrophy and inactivity of the specific glandular substance,” which means that it also may lead to cretinism in children and myxedema in adults. “It is very suggestive,” continues the same author, “that in a large proportion of cases where the goiter is not of too long development and is of the

parenchymatous type, the iodine treatment has for long years been found to give good results"—provided, let me add, that the source of intoxication is also removed.

The recognition of the connection of the thyroid—always including the parathyroids—with the defensive mechanism of the body, enables us also to get better results in the treatment of goiter by emphasizing the importance of endogenous intoxication in the causation of the disease. A patient may not do well, as is often the case, under iodine or thyroid gland,—or both combined, the best plan,—even when given early, avoiding strictly all cases showing signs of Graves' disease, but this will soon change if, besides giving these agents, attention is paid to any condition whatsoever; intestinal, hepatic, gastric, renal, etc., capable of provoking autointoxication. Concomitant goiter and chlorosis are occasionally witnessed in young girls; the treatment of the coprostasis so common in them will sometimes alone cause the swollen thyroid to recede. Poor or carious teeth—possibly by hindering mastication—suppurative foci, briefly any condition capable of producing systematic poisoning, including toxins and endotoxins, must be eliminated. In short, the successful treatment of goiter is not a mere question of thyroid and iodine. Intestinal antiseptics, the salicylates, creosote carbonate, menthol, etc., are also helpful, when intestinal functions have been regulated. This accounts for the success obtained by McCarrison with thymol, his belief being that a special micro-organism was the pathogenic factor in his patients.

The recognition of cases which are amenable to medical treatment is not difficult. Such treatment will prove effective, as a rule, when the gland is diffuse and elastic, i. e., of the parenchymatous type, particularly in adolescents and young adults. In the nodular, cystic, colloid, fibrous and intrathoracic forms, iodine is seldom of value and sometimes dangerous. I have seen a single drop of tincture of iodine cause marked toxic phenomena in nodular goiter. Yet the fact that the line of demarcation between medical and surgical cases is not always clearly defined warrants a test of the medical treatment—while closely watching the patient—a step which sometimes yields unexpected favorable results.

Finally, recognition of the fact that we are dealing with a reaction of an organ having for its function to defend the body against poisoning seems to me to brand goiter as a danger signal which the authorities of countries or districts in which goiter prevails should heed. They rightly quarantine sufferers of contagious diseases; but in many districts they supply water which is a menace to the health and mental development of thousands of children and adults. No water known to be capable of producing goiter should be used by a

community. Even the resources of boiling fails here, since it minimizes, but does not destroy, the pathogenic agent. Moreover, medical school inspectors should look upon an incipient goiter as evidence that the child or adolescent bearing it is being exposed to physical and mental decay through chronic poisoning, and strive to prevent it by calling attention to the need of immediate treatment on modern lines.

SYMPATHETIC OPHTHALMIA, ITS GENESIS, TREATMENT AND PROPHYLAXIS.*

By M. C. WEBBER, M. D., PORTLAND, MAINE.

Gentlemen:—

A stone-cutter, who worked at Steep Falls, some weeks ago received a perforating wound of the right eye; a chip of steel, presumably, was the penetrating agent.

Today the eye is blind; it is atrophic. The pupil is occluded by exudate; the details of the iris are indistinct. The injured eye has remained painful; the patient winces when the eyeball is touched.

At present, he complains of loss of sight in the left eye. There is a marked ciliary injection, the pupil is bound down by posterior synechiæ, the iris is thickened and cloudy, there are deposits on Descemet's membrane. Ophthalmoscopically, the vitreous appears cloudy from numerous small opacities.

This stone-cutter, unfortunately, has developed a sympathetic iridocyclitis of the left eye. There have been no prodromal symptoms, a fact of importance, as a failure of vision is often the first knowledge which patients have of their condition.

The man is healthy, his pulse is normal, he has no fever, there are no other clinical signs of constitutional derangement. It is a striking anomaly to find that after injury of one eye, a disease may appear in the other that exactly resembles the first.

It is imperative that we know in what diseases of the eye we should fear sympathetic disease of its fellow. There are two kinds of inflammation which may follow injury to an eye, purulent uveitis and chronic plastic uveitis or iridocyclitis. It is essential for the origin of a sympathetic ophthalmia, that the first eye must have suffered from a chronic plastic uveitis.

*Read before the Portland Medical Club.

When pus producing organisms invade the eye, there are tempestuous symptoms within a short time. Ciliary injection is marked. The pain is intense. There is discoloration of the iris and accumulation of pus in the anterior chamber or vitreous, which quickly develops into a panophthalmitis, with great swelling and protrusion of the globe; or the purulent infection runs a sub-acute course, which ends in phthisis bulbi. This is the clinical picture of purulent uveitis.

In the case of our stone-cutter, the course was quite different. The corneal wound healed normally; however, the eye never has been perfectly quiet. There is ciliary injection, deposits may be seen on the posterior surface of the cornea. The iris looks muddy. The pupil is contracted and no longer reacts to atropin; it is occluded by a fibrinous exudate. The eyeball is atrophied. Here we have the picture of chronic plastic uveitis, or iridocyclitis.

It is not an unconditional necessity for the genesis of a sympathetic ophthalmia, that there be a perforating injury; altho this is the commonest cause when followed by chronic plastic uveitis.

Frequently, after subconjunctival rupture of the sclera sympathetic ophthalmia occurs. Again, in cases of interocular sarcoma and rarely after intra-ocular hemorrhage, the same picture may be observed. Guillery, by the injection of serums, ferments and bacterial toxins has produced inflammations, whose anatomic pictures were identical with those of the so-called sympathetic iridocyclitis.

Neither does it follow that every eye, in which there has been a chronic plastic uveitis, must set up a sympathetic ophthalmia in its mate; altho I wish to reaffirm that this condition is essential in one eye, if there is to be a sympathetic ophthalmia in the other.

It has been estimated by Roemer that only about three per cent of perforating injuries result in sympathetic ophthalmia. Twenty-five per cent of these are in children.

Admitting that a chronic plastic uveitis is essential in the first eye and that the condition is present in the right eye of our stone-cutter, can we tell positively, that the disease is sympathetic iridocyclitis?

Cannot our patient have a plastic, syphilitic, tuberculous, rheumatic or diabetic iridocyclitis occur just the same as in the eye of a person, whose eyes have been well hitherto?

It must be admitted that the patient can have any of these and this is because the uvea, the most vascular membrane of the eye, reacts in the same way, anatomically, to the entrance of all inflammatory agents. The fibrinous exudates are always the same, whether the micrococcus, or an infectious bacillus, a serum, a ferment, or a toxin settles in the iris.

The diagnosis of sympathetic ophthalmia is only one of probability, based on exclusion of clinical constitutional symptoms and negative Von Pirquet and Wassermann reports, together with the fact, that there is a lighting up of the irritation in the eye that was first diseased.

Granting that there is a lighting up of the irritation in the right eye of our patient, as is shown by his wincing, when the eyeball is palpated, how can we explain the transmission of the inflammation to the other eye?

The course of the irritating agent, since the days of Mackensie, 1835, has been hypothetical. He believed that the optic nerves afforded the chief paths for the extension of the inflammation. Twenty years later, Mueller asserted that the ciliary nerves were the transmitting paths. Bacteriology dealt these theories a severe blow; with its introduction, two bacterial theories appeared.

The migration theory, originated by Leber, in 1881, assumes that the infective agent, having gained access to one eye, there sets up an iridocyclitis, which unchecked, extends along the optic nerve, its sheaths, the chiasma, optic nerve and sheaths to the fellow eye. Logically, according to this hypothesis, we should expect, in the second eye, that the disease would first manifest itself as an optic neuritis; such is not the case, clinically.

The metastasis theory, devised by Berlin and elaborated by Rømer, overcame this difficulty, by asserting that the exciting agents are invisible micro-organisms, which have a specific predilection for uveal tissue.

These micro-organisms introduced through injury to one eye, by metastasis, through the blood-stream and their selective action on uveal tissue, set up a sympathetic ophthalmia in the other eye, without involving any other tissue or organ.

This theory, today, enjoys the greatest prestige, however, certain peculiar characteristics of sympathetic ophthalmia, makes it necessary to endow these invisible agents with characteristics, which exceed those generally conceded to infective micro-organisms.

Clinically, it has been observed that sympathetic ophthalmia never occurs inside of fourteen days. Fuchs, recently, supporting Rømer, asserts that it is necessary for the infection to reach a certain height before metastasis can occur, hence the delay.

The long interval that is sometimes observed, between the involvement of the two eyes is explained by having the organisms lie dormant for months and years, until the eye becomes once more inflamed and the virulence is increased enough for metastasis to occur.

The consensus of opinion, today, is that this inflammatory process is a protective reaction against the invading bacteria; this makes it difficult to explain why metastasis only becomes possible, after the

mobilization of the means of protection, through which the bacteria should be destroyed.

Other facts that are destructive to the metastasis theory are,—that sympathetic ophthalmia occurs after sub-conjunctival rupture of the sclera, in cases of intraocular sarcoma and idiopathic iridocyclitis. Also, recent experiments by Guillery have given the same anatomic picture, following the injection of serums, ferments and toxins.

Elschnig of Prague, Austria, reviewing these facts and holding that the metastasis theory is untenable, has, through the method of compliment fixation, that on which the Wasserman reaction is based, evolved the so-called antigenic or anaphylactic theory.

If the tissues of another species, as blood or serum of an organ, are introduced, subcutaneously, intraperitoneally, or intravenously into an animal, they are as a rule reabsorbed as antigens. This blood or serum of an organ produces, in the blood of the animal injected, a reaction product, which is known as an antibody.

This antibody, in the case of blood-corpuscles, is known as a hemolysin and is specific for the blood of the species used. For example,—The blood-serum of a rabbit injected repeatedly with the blood of cattle contains a hemolysin which is only specific for the blood-corpuscles of cattle. In other words, when test-tubes containing the blood of various species are treated with the serum of the injected rabbit, only in that one containing the blood of cattle, will the corpuscles be found dissolved. That is so say, this antibody is animal specific.

Elschnig, using a so-called antigen consisting of an emulsion of uvea and eye pigment epithelium, which he has injected subcutaneously, intravenously, intraperitoneally and directly into the eye, has shown that an antigenic reabsorption takes place, with the production of an antibody, which is specific for eye pigment and uveal emulsions. Experimentally, he has also proven that this antibody is specific, not only for the uvea of animals of the same species as the animal injected, but also for the uvea of all species. In other words, this antibody is organ specific and will react in an emulsion of any eye pigment and uveal epithelium.

Anaphylaxis, so-called, is based on antibody formation. If a Guinea-pig is injected with a small amount of horse-serum, it is reabsorbed and antibodies are formed. If, when this process of antibody formation is completed, some fourteen to twenty days later, we again inject some horse-serum, the pig exhibits the symptoms of shock, which we term anaphylaxis, and dies; while the same amount, in a pig which had not been previously injected, would cause no reaction. Besides the general anaphylaxis, there is a local reaction observed, at the site of injection or the site of the first injury.

In the light of these facts, Elschmig has evolved the following hypothesis, as explaining the origin of sympathetic ophthalmia.

"If thru an injury, whether directly thru the injury itself, the foreign body or the introduced micro-organisms, an eye becomes inflamed and uveal tissue is damaged, the uveal tissue and pigment is reabsorbed in an antigenic form and antibodies are formed, and set free in the blood. These antibodies react with the remaining normal uveal tissue of the injured eye and likewise with the uvea of the other eye, rendering them hypersensitive; in other words sensitizing them.

Now, just as we have seen that a condition of anaphylactic shock occurs in the animal that receives the second injection of a serum, with which it was previously treated, so with the eyes, and we are thinking especially of the second, whose uveal tissues have been sensitized, an anaphylactic shock occurs at a later date, when even one single uveal cell is destroyed, with resorption of its pigment.

This anaphylactic shock is the sympathetic inflammation.

The anaphylactic theory makes it possible to explain easily, points in the picture of sympathetic ophthalmia, which have proven to be insurmountable by the other theories.

This theory makes it plain why at least fourteen days must lapse before the second eye becomes involved, for at least ten days are required for the resorption of the antigen and the formation of the antibodies, and from fourteen to twenty days for anaphylaxis to occur.

It explains why the sympathetic iridocyclitis may occur sometime after the enucleation of the exciting eye, for while the source of the antibodies has been removed, sufficient numbers of antibodies remain in the system for the sensitization of the second eye.

This theory shows why enucleation of the first eye after involvement of the second has no special effect.

Furthermore, it makes it clear why sympathetic ophthalmia never occurs after a panophthalmitis or a purulent iridocyclitis, because in this inflammation the uveal tissue is totally destroyed, and the antibodies necessary for the sensitization of the other eye are not formed.

The anaphylactic theory is applicable to those cases of sympathetic ophthalmia occurring after subconjunctival rupture of the sclera, intra-ocular sarcoma, and blunt trauma; because in these cases there is a breaking down of uveal tissue, reabsorption of which produces the antibodies.

Acceptance of this theory makes it necessary to assume that in spontaneous iridocyclitis, from whatever cause, sensitization of the second eye results from the formation of antibodies specific for uveal tissue, and makes it plain that in its course and prognosis, it should be considered no different than a sympathetic ophthalmia.

The anaphylactic theory, while it explains easily the clinical and anatomical pictures of sympathetic ophthalmia, has one weakness. That is, in stating the exciting cause, which starts the breaking down of even the one uveal-epithelial cell, whose reabsorption is necessary to produce the anaphylactic shock, which is the sympathetic inflammation.

Elshnig gets around this, by asserting that in those cases of so-called spontaneous iridocyclitis, which give a negative Wasserman and Von Pirquet reaction and in which bacterial infection, as gonorrhea, rheumatism, nose and sinus suppurations can be eliminated and in which there are no clinical symptoms of diseases of the heart or vessels, diabetes, carcinoma, gout or kidney changes, there exists a condition of auto-intoxication.

Reverting to the case of our stone-cutter and accepting the anaphylactic theory as explanatory of the method of transmission of the inflammation to the second eye, what shall our treatment be?

Fundamentally, the same as for any case of iritis. The regular instillation of atropine to break up and prevent the formation of adhesions, the use of eserine if the tension is increased. Heat applied for hours at a time to aid the reactive hyperæmia.

The subconjunctival injection of salt solution to stimulate the reabsorption of exudate in the anterior chamber and vitreous.

Energetic general treatment of whatever is considered to be the constitutional excitant of the anaphylactic shock.

Large doses of sodium salicylate have been reported to produce favorable results.

Neurotomy and neurectomy are of no value as the formation of antibodies is not interfered with nor sensitization prevented.

Enucleation of the exciting eye is of no value after involvement of the second, because the second is already sensitized, and should never be done if any vision remains, as the second eye may be totally destroyed and complete blindness result.

Sympathetic ophthalmia is prevented much more easily than cured. Acceptance of the anaphylactic theory makes it necessary for prophylactic measures to be applied before the sensitization of the second eye and to include eyes suffering from spontaneous iridocyclitis, whose vision is lost, specially when a non-curable constitutional anomaly exists, which might easily prove to be the exciting cause of anophthalmos in the second eye.

Exenteration or enucleation of the exciting eye, providing its vision is totally destroyed, and that it is removed inside of ten days, that is, before the production of the uveal specific antibodies and the sensitization of the second eye, will absolutely ward off involvement of the second eye.

Complete removal of uveal tissue and this, inside of ten days, are the essentials of prophylaxis, if we accept the anaphylactic theory.

CONSERVATION OF HEARING.*

BY DR. P. M. WARD, HOULTON, ME.

In order that we may be able to conserve the hearing, let us consider some of the most common causes of deafness.

No attempt is made in this paper to cover the ground and mention every cause of deafness, but rather to point out those causes which are both very common and also easy to overcome.

These causes to be mentioned are present in the great majority of cases, and though easy to remove, are very frequently left to work slow but certain damage to the organs of hearing.

Infection and catarrhal conditions of the eustachian tube and middle ear are the most common causes of deafness.

Infection may reach the middle ear through the external ear, eustachian tube and rarely by means of the blood and lymph channels.

I shall only refer to the most common way — infection from the nose and throat by way of the eustachian tube. Infection by way of the tube is not liable so long as the nose and throat are in healthy condition. The cilia of the tube prevent infection to a large extent, but when there are adenoids, tonsils or nasal obstructions which harbor germs, infection takes place in spite of nature's barriers.

It is the presence of adenoids, tonsils and nasal obstructions and not the disease itself, that makes it so common to have disease of the middle ear in the acute infectious diseases as scarlet fever, measles, diphtheria and influenza.

It has been said that the examination of a sick child is not complete until we have examined the throat. If we examine the throat of every child under our care, we shall find many tonsils and adenoids. All adenoids and most tonsils should be removed. These growths endanger the child in many other ways. We are considering them now, only as common factors in the causation of tubal catarrh, tubal infection and consequent deafness.

In examining tonsils which seem small or embedded, by causing patient to gag (which by the way is not a difficult thing to do) one is able to see that the posterior pillars are brought toward the median line of the throat, and the outline of the tonsils may be seen much the same as when you pull them forward with forceps.

Of all tonsils, embedded ones are the worst. They look innocent, but their crypts are filled with caseous material.

Twenty-three to forty-three per cent of ear troubles occur in childhood, on or before fifteen years of age. This is the adenoid period.

*Read before the Aroostook County Medical Society, June, 1913.

Heredity plays some part in the causation of deafness. Institutions for deaf mutes attribute twenty-five per cent of ear affections as due to heredity. Here again it is believed by many that deafness is frequently caused in the first two years of life because of adenoids and tonsils, and that it is not deafness that is inherited so much as that children inherit that tendency to lymphatic overgrowth, as manifested in adenoids and tonsils.

Acute middle ear affections are most prevalent in winter and spring, furnishing at these seasons sixty-six per cent of the total number for the year. At those seasons, catching cold is most common, but the child would not catch cold so often if adenoids and tonsils were not present.

Next in frequency as causes of infection of the eustachian tubes are the various nasal obstructions, which, like adenoids, favor infection and act mechanically to prevent the free distribution of air to the ear drums with consequent deafness. The most common deformity of the nasal fossæ is a deviation of the septum. The septum is very rarely perfectly straight. It is not necessary for it to be so, but it is necessary that it should not touch at any point of the turbinates, or come so near touching them that a moderate swelling of the turbinates from coryza or other causes will allow contact. Deformities of the nasal septum are common. They are not generally noticed by the patient unless very pronounced. One should be able to breathe through each nostril separately and with comfort. If this cannot be done, there is some obstruction which should be corrected by operation. Adenoids may be the cause of deviated septi in this way. With adenoids, we frequently find a high arched palate which shoves up on the septum and causes it to fold upon itself during the growth of the child.

In adult patients complaining of deafness in one ear, we generally find nasal obstructions of the same side.

Enlargements of the turbinates, polypi or other growths, or in fact, any obstruction to one or both nostrils, are causes of tubal infection, and consequent deafness.

If then, adenoids, tonsils, and nasal obstructions are the common causes of deafness, in our effort to conserve the hearing, it is obvious that our plain duty is to remove the offending growths and to correct the existing deformities.

Adenoids should be removed whenever they are present at any age. They are best removed by an appropriate sized curette, followed by the finger wrapped in gauze, which has been wrung out of 50% alcohol, paying special attention to the fossæ of Rosenmuller.

The most satisfactory age to remove tonsils is at about three years, or as soon thereafter as possible. The only satisfactory way

is to do the enucleating operation, free the pillars and then remove with the cold wire snare.

If removed in this way, the tonsils will not return, there is very much less danger of hemorrhage, practically none under thirteen years of age.

Taken out in this manner the capsule may be seen to cover two-thirds of the tonsil, a blunt probe can be passed down any one of the crypts and it will come up against the intact capsule. The end of the probe can be seen through the transparent capsule, so accurately does the wire of the snare follow its proper course. After removal, the tonsil should form a round mass and not flatten out when placed on a table.

The sub-mucous resection of the nasal septum is accepted to be the best way to correct nearly all of its deformities. It has more advantages and less out's than any of the other methods which have been devised.

When the adult comes for treatment of existing deafness caused by adenoids or tonsils in earlier life, or by deformities in the nasal fossæ, we should first by operation as needed, put the nasal structure into as normal a condition as possible, then overcome the eustachian trouble and to equalize the air pressure on the ear drums, we have inflation.

There are three ways to inflate: First, Valsalva's, by having the patient close both nostrils with his thumb and finger, then have him blow into the nose. This method is not advised because the patient does it too often, and causes a flaccid condition of the ear drums.

The second method is by politzeration, which is done by blowing air into one nostril by means of an eight ounce rubber bag. The other nostril is closed and the patient is required to swallow just as we compress the bulb of the bag. This method is fairly serviceable, but may, like Valsalva's method, be objected to, because the air will be more easily forced into the more patulous tube.

The third method, or catheterization of the eustachian tube through each nostril and inflation by means of the Dench inflator, is by all means the most satisfactory. By this means we can overcome obstruction in each tube separately, we can regulate the amount of air pressure, guided by means of a tube, one end of which is placed in the patient's ear, the other in our own. This diagnostic tube also gives information of the conditions of the eustachian, judged by the sound we hear.

With the Dench apparatus, we may also blow into the eustachian tube, vapors of such drugs as camphor, menthol and iodine. This inflation by catheterization is the best way to treat the eustachian tube and to restore normal equalizaion of air, so far as it can be done. We

should tell the adult patient suffering from progressive deafness, that the most we can expect from constant treatment is, that we may be able to improve the hearing somewhat, perhaps only keep it where it is, and in some cases only prevent them from getting deaf as rapidly as they would without treatment. How much better to forestall all this, by attention to the adenoids, tonsils and obstruction to the nasal passages before the mischief has been wrought.

SOME PHASES OF MENTAL DISEASES OF IMPORTANCE TO THE GENERAL PRACTITIONER.*

H. M. SWIFT, M. D., PORTLAND.

Mental diseases form a branch of medicine in which many physicians are inclined to take comparatively little interest. Indeed, the practitioner often feels that the subject is one of relatively little importance. He is apt to reason that if a person is insane this will be evident to anyone and that all attempts to determine as to the kind or form of insanity are of no practical value.

This feeling is indeed perfectly comprehensible in these days when greater and greater demands are made upon his versatility along the lines of the various specialties, and to a degree one sympathizes with the point of view that the finer points of diagnosis in psychiatry may be often of no immediate importance, although many exceptions to this occur.

I think however, the same might be said in regard to many internal diseases. For example one might ask, What difference does it make whether a patient has leukæmia or pseudo-leukæmia? Or again, Will the treatment of cardiac disease vary greatly whether the lesion is located in the mitral or in the tricuspid valve? Yet what conscientious practitioner would omit a careful physical examination in order to determine as well as possible the exact site and character of the lesion? I do not wish to imply that this attitude toward mental diseases is held by all general physicians for that would be most certainly untrue, but from personal conversation I know that the feeling of many is something as I have indicated.

*Read before the Portland Medical Club, Jan. 8, 1914.

In a short paper like the present, it is out of the question of course to mention many of the features of mental disease which should be of general interest and I have selected three conditions of which to speak which I regard as particularly important. These are:

First — The early diagnosis of general paralysis.

Second — The differentiation of a mild recurrent depression or melancholia from neurasthenia.

Third — The recognition of chronic alcoholic insanity.

I shall take up each of these in turn, and before considering the diagnostic points, I shall give my reasons for thinking it to be worthy of attention.

EARLY RECOGNITION OF GENERAL PARALYSIS.

It is hardly necessary to discuss the importance of this as everybody knows that the general paralytic is a very erratic, unreliable and irresponsible sort of person who needs supervision lest by some of his actions he ruin or disgrace his family or even inflict bodily injury. Thus wild business undertakings, scrapes of various kinds and indiscretions attended even with criminal liability may be expressions merely of an oncoming general paralysis; and often all these disagreeable mishaps might have been prevented if the actual condition had been but suspected and a reasonable supervision exercised.

I shall now mention a few features which indeed may not render us an absolute diagnosis but may serve to make us suspicious, which perhaps, for the time being, may suffice.

When general paralysis is mentioned the first thing which usually enters the mind is grandiose delusions — “millions and millions of dollars,” with the typical speech defect. I have no hesitation in saying, however, that although these features may be very amusing and spectacular, grandiose delusions do not concern us particularly in the early stages of general paralysis, and indeed are present in only a small number of cases throughout the whole course of the disease. I have been told by older practitioners that grandiose ideas were of much commoner occurrence fifty or sixty years ago than today, and that the symptomatology of the disease has changed in this respect; all of which is interesting although no reason can be given to account for this fact.

It has seemed to me that the most constant diagnostic feature of general paralysis is the presence of dementia, or in other words mental deterioration, which may be indicated by defects of memory usually associated with a certain emotional variation manifested either by dullness or indifference or else by a decided over-happiness or mild exhilaration like a person who is slightly intoxicated.

Of extreme significance is a history of a change of character or of behavior which is out of accord with the patient's natural character and behavior as his friends have known him in years gone by. These facts must be obtained by interviewing the family or friends and it should be emphasized that for the diagnosis not only in general paralysis but in many other forms of mental disease, sidelights on the cases must be derived by histories given by others than the patient himself.

Very frequently upon being questioned, the wife of the patient will say that her husband has become irritable or even threatening of late and it is necessary to use considerable tact in order to get along with him at all. I remember, however, of one case where a man of naturally irritable make-up became quieter and more agreeable in his family so that his wife thought his disposition had changed for the better. Thus a fundamental change of character of any sort is significant.

In order to determine whether a memory defect exists we may ask the patient a few simple questions in regard to the events of his previous life, being careful of course to ask only such things as he might reasonably be expected to know. For example it would seem that a person of ordinary intelligence ought to know his present age, his age at time of marriage, and the number of years he has been married; but a general paralytic often shows inconsistencies in his answers to simple questions of this sort. Another test is to give the patient a series of words or numbers which he tries to recall after a short interval, these of course being of such a character as to be recalled by a normal person. I have found for example that a series of numbers of two figures each can be reproduced by persons of normal mentality after an interval of one-half to one minute.

Thus 27 - 12 - 91 - 16 — 1 minute interval — reproduced.

Or 27 - 12 - 91 — $\frac{1}{2}$ minute conversation — reproduced.

Care must be exercised of course that the test employed be suited to the patient's natural mentality. In the neglect of this precaution I have seen failures on the part of the patient wrongly interpreted, the deficiency being considered to indicate deterioration whereas it really signified nothing more than a native feeble-mindedness. The employment of a test too difficult for the individual case may also furnish an opportunity for ridicule by unsympathetic critics; but used with common sense, simple tests of this kind may be distinctly helpful.

Another well known defect which is often present is the tremulousness of the handwriting with omission of letters.

Frequently the presence of physical signs, tremors of the fingers, tongue and facial muscles, or diminished light reaction with irregular-

ities in the contour of pupils may be an important aid to diagnosis. Yet the absence of physical signs does not by any means exclude general paralysis. I have seen normal pupils in a case of many years standing. The most constant characteristic is mental deterioration and without that one should hesitate before making an absolute diagnosis. In doubtful cases the Wassermann test may be of value.

If general paralysis is suspected it is naturally the duty of the physician to warn the family and it is generally considered best to commit all cases. But objections to this procedure are often made by relatives so that in quiet cases one must sometimes yield to their wishes to keep the patient at home; but if this is done, adequate supervision should be provided and the physician must feel that, in not committing, a certain amount of risk is always involved.

DEPRESSION AND NEURASTHENIA.

The next point I shall consider is the differentiation of mild recurrent depression or melancholia from simple neurasthenia. The reason why I feel this distinction to be important is that the treatment of the two conditions is often radically different.

In the classification of Kræpelin now generally used in America the term melancholia has been retained only for some depressions occurring at the involution period but in this paper the terms recurrent depression or melancholia have been employed because they may be a little more familiar and are for our purpose sufficiently descriptive of the symptomatology and course of the psychosis.

I am well aware also that objections to the term neurasthenia might be made inasmuch as some believe that true neurasthenia does not exist but that all neurasthenias are merely symptomatic of some underlying condition. It is doubtless true this term is often too carelessly used and in every case the greatest care should be exercised to recognize and treat any bodily abnormalities which can have any possible connection with the neurosis. But granting all this I am confident there still will remain many cases characterized by heightened irritability, feeling of fatigue and general nervousness which are classed very properly as neurasthenias.

Mild depressions and neurasthenias show a superficial resemblance one to another in that in both conditions the patients are worried, discouraged and suffer from a feeling of fatigue. They differ in that the neurasthenic although often depressed, is open to some extent to reason and persuasion in regard to his disagreeable feelings, while the melancholiac can not be so influenced by reason and persuasion, at least to any considerable degree.

The character of the depressions also in the two conditions is different. The depression of the neurasthenic is logical and at the same time superficial. He is worried and discouraged merely about his condition, while the depression of the melancholiac is primary and fundamental. The similarity is, however, such that a mild melancholia is sometimes called a neurasthenia. Frequently in cases of depressions occurring in later life, one obtains a history of a previous attack of something which was called nervous prostration; yet in all probability these are recurrent depressions, the earlier attack having been not one of neurasthenia but the first manifestation of a recurrent condition which after an interval of years is being repeated.

The chief diagnostic features of a mild melancholia or simple depression are slowness of movement, a languid or subdued manner of speaking, associated with a greater or less degree of sadness, and a certain confusion of thought or to express it more exactly, a difficulty in thinking. In severer types, delusions may be present particularly feelings of self-reproach. If these are prominent, there is usually little difficulty in recognizing that the patient is insane; but in the milder cases, delusions may be lacking and it is with this latter type that we are chiefly concerned.

Slowness of speech and action, an actual disturbance of thought processes, associated with a continuous and unvarying sadness are the diagnostic features of a mild melancholia but are not present in a simple neurasthenia.

The treatment of the two conditions is different because the mental attitude of the two classes of patients are different, for, as has been said previously, the neurasthenic is logical and generally open to reason and persuasion while the depression of the melancholiac is deep-seated and he is not thus open to these influences, so that with the neurasthenic, reassurance and encouragement with a painstaking explanation of the meaning of the symptoms on the part of the physician are often of great benefit and frequently the sufferer may be shown how to gradually overcome the disagreeable sensations by discipline of the will power, and, as confidence is thus gained, the improvement may become more and more rapid. A true depression on the other hand is something more profound so that these measures employed to such good advantage in neurasthenia are here too often of little avail and even distinctly harmful.

The treatment of the depression of melancholia may be summed up in two words — rest and nourishment. Patients should be allowed to follow their inclination to remain quiet and, of the various kinds of rest, rest in bed is often the best. In severe neurasthenia as well, rest and feeding are also indicated but, in cases of ordinary severity, the rest should be combined with intervals of effort.

Naturally in melancholia, also, a reasonable effort should be made to encourage the patient, although one must not expect ordinarily to accomplish much in this way, while the attempt to divert the mind by travel and society, etc., is distinctly contra-indicated. In neurasthenia, on the other hand, travel may be beneficial.

It seems to me that the attitude of the physician toward a true depression should be much the same as toward a self limited, infectious disease. The tendency of both is toward recovery and the problem is how best to conserve the strength of the patient. The rest must be left to nature and to time.

If the case is of the agitated sort and the patient is deluded and restless, the question of soporific drugs arises. It is considered best to avoid these as far as possible and much drugging is no doubt harmful, although mild preparations, as the bromides, for short periods, or an occasional veronal powder may be useful. Where practicable, prolonged neutral baths or other hydrotherapeutic measures will be found to have a quieting effect.

If the patient becomes so disturbed that home care is difficult, it is much better to commit to a hospital than to maintain an artificial stillness by profound narcotization.

In all melancholias, the question of suicide is to be considered and proper precautions taken.

CHRONIC ALCOHOLIC INSANITY.

Chronic alcoholic insanity is important to recognize because an individual so afflicted often suffers from very clear cut and insistent delusions and if left at large may become homicidal. Of most common occurrence are delusions of infidelity, the patient often believing his wife to be unfaithful; and so plausible a story is sometimes told that one hardly knows whether he is dealing with a delusion or an actual fact; but here a careful sizing up of the whole situation will usually lead to a correct conclusion. Associated with these delusions of infidelity is often present false hearing, and indeed vivid hallucinations are typical of all forms of insanity due to alcohol.

The recognition of chronic alcoholic insanity may be attended with especial difficulty because the general appearance and manner often suggest nothing abnormal to the casual observer and the patient is usually reticent about speaking of his delusions. At the same time, the hidden idea may be very vivid and insistent in his own mind and it is exactly this which renders him so dangerous. And this danger is increased because his appearance is so normal that nobody has the least suspicion that anything is wrong until, in a sudden fit of frenzy, mischief is done.

I have personally known of a number of instances of alcoholic insanity in which severe bodily injury was inflicted upon the wife and of others in which this was narrowly averted. I am also of the opinion that some of the cases we read of in the newspapers where a man kills his wife or other members of the family without apparent cause are instances of chronic alcoholic insanity.

A point which should arouse suspicion is when a man previously known to be a steady drinker becomes increasingly disagreeable and antagonistic toward his wife. This circumstance may indicate that ideas of infidelity are developing and if we can get the patient to admit that he hears voices, the diagnosis is rendered reasonably certain.

The majority of insane people are harmless. The chronic alcoholic is an exception to this rule.

Many other phases of insanity might equally be mentioned but I have thought best to confine myself in this paper to these three. In regard to the distinction between neurasthenia and mild depression, some might disagree. I offer it because it seems to me to be of practical value. As to the other conditions considered, I think no one would dispute that it may be well worth while to head off the follies of a general paralytic and in the other instance to prevent violence.

SYMPOSIUM ON EXOPHTHALMIC GOITRE.*

ABSTRACT OF PAPERS BY DR. F. E. LESLIE, ANDOVER, ME.

1. The Pathology of Exophthalmic Goitre.

BY O. S. HILLMAN, M. D.

In this disease its pathology is intimately associated with the etiology of the condition. While pathology, as narrowly applied, frequently carries with it merely the idea of a series of gross and microscopic alterations in the morphology of an organ or tissue, in this disease there should be a comprehensive consideration of the pathologic physiology of the thyroid gland. The thyroid being a gland of internal secretion, complicates the study of its abnormal physiology. Some authorities believe that in exophthalmic goitre, the thyroid is only secondarily involved and that there is some primary determining factor,

*Transactions of the Clinical Society of the New York Post-graduate Medical School and Hospital, Dec. 19, 1913, from the February issue of the Post-graduate.

either of a chemical or nervous nature, at work. The consensus of opinion however, is in favor of excessive secretion of the gland as causing the typical symptoms of the disease. It is thought also that there is an acute intoxication present, due to a diminished power in the blood to destroy this excessive secretion.

Anatomically, in the gross pathology, the gland is usually larger than normal and vascularity is marked. The cut surface of the gland is dryer and less viscid than normal. There is an increase of parenchyma and stroma and marked diminution of the colloid material. The epithelium lining the alveoli, instead of being cuboid in form, assumes a columnar outline. The pathology of exophthalmic goitre is by no means clear, due to our lack of knowledge of the relations of the thyroid gland to the physical well being of the entire system.

2. The Parathyroids.

BY W. G. MACCALLUM, M. D.

Experimental study of these organs has consisted largely in observing the effects of their extirpation on the one hand, and the injections or extracts of them, on the other. Of tetany—the well known result of extirpation-hyperexcitability of the nerves is the most definite feature. This is no doubt due to the great reduction of calcium compounds in the blood, and injection of calcium into the veins will almost instantly stop the symptoms of tetany. There is no very good evidence of the presence of a special poison in the circulation in tetany. Parathyroid extract injected intravenously, prolongs life somewhat and decreases the actual convulsions, without lowering the excitability of the nerves. No definite relation is found between the abnormalities of the parathyroids and exophthalmic goitre. Infantile tetany and that of pregnancy and lactation, and other more obscure conditions, appear to be caused not by the destruction of the parathyroids, but by a disturbance of calcium metabolism. Therapy, in such cases, is best attempted through the removal of the cause, and not by supplying parathyroid extract. When the parathyroids are injured or destroyed by operation or otherwise, and symptoms of tetany result, parathyroid extract may be of temporary use. Injections of calcium salts, however, are far more effective, but transplantation of parathyroid tissue offers the only hope of permanent relief.

3. The Medical Treatment of Exophthalmic Goitre.

BY DAVID BOVAIRD, JR., M. D.

Treatment cannot be directed to a specific cause, as we do not know the cause of the disease. It must be in the main symptomatic,

and is often purely empirical. Rest is of prime importance and every case will react more or less to properly applied rest. Next, the diet of these patients — while there is no specific diet for exophthalmic goitre — on account of excessive protein destruction, we would infer that a highly nitrogenous diet would be indicated, but it is found that this causes marked activity of the thyroid, so meat is advised against. To correct the emaciation which marks the disease, frequent feedings of small quantities of carbohydrates and fats are indicated. Milk and eggs are of use. Hydrotherapy is of distinct benefit. Baths of moderate temperature quiet the nervous symptoms. In excessive excitement, ice bags to the neck and over the heart mitigate the severity of the symptoms. Change of climate helps some cases. Free elimination is of advantage — one or two drams of sodium phosphate in the morning usually being sufficient. Drinking water freely, aids elimination both from bowels and kidneys. Bromides to allay nerve irritability, should be pushed to the point of tolerance and continued as long as possible. Forcheimer recommends the use of quinine hydrobromate, five grains with ergotin, one grain given three or four times daily. Digitalis and strophanthus may be used for the tachycardia if there is a definite myocardial insufficiency, but in ordinary circumstances it is well to avoid their use.

4. The Serum Treatment of Exophthalmic Goitre.

By S. P. BEEBE, M. D.

This is based on the generally accepted fact that the main symptoms of the disease are caused by an over-activity of the thyroid gland. The antigen used for Dr. Beebe's serum is prepared from the glands of human beings having exophthalmic goitre. To obtain the serum, sheep are inoculated subcutaneously from the human glands, six or eight weeks' treatment being necessary before the animals are ready to be bled. Some three thousand patients have been treated with the serum for a sufficient length of time to warrant the statement that this is a valuable part of the medical treatment of exophthalmic goitre. Fifty per cent have been cured, and thirty per cent have been greatly improved. The mortality has been three per cent. The treatment needs a considerable length of time — from two to six or eight months. In a case receiving the serum for two months, twenty injections were given. One case is reported where the treatment was continued for a year and a half with a cure resulting. This serum cannot be given to all cases, and of itself does not constitute a treatment of exophthalmic goitre, but only a part of the medical treatment of the disease.

5. The Surgical Treatment of Exophthalmic Goitre.

By E. W. PETERSON, M. D.

In the present state of our knowledge, surgery unquestionably occupies first place in the treatment of this disease. However, no surgeon of experience will claim that all cases should be subjected to operation. Before operating on an early or mild case, I would favor a thorough trial or such measures as have been mentioned in the preceding papers. If these fail in a given case within a reasonable time, surgery should not be withheld too long. The surgeon should be given a fair "risk" to work upon. Mild cases will stand general anæsthesia perfectly well. In advanced cases, the most careful consideration must be given to preliminary preparation and to choice of anæsthetic. My choice is the gas-oxygen method, first giving a hypodermic injection of morphine. The plan of Crile, to "steal the operation," may be used by resórting to the rectal administration of oil-ether anæsthesia as suggested by Dr. Gwathmey. This method is in the experimental stage, and until studied further, cannot be endorsed. The operation is a delicate, but by no means a difficult one. The low curved incision of Kocher gives the best cosmetic result. The larger lobe should be removed but under no circumstances should the whole thyroid gland be taken out. Avoid injury to the parathyroid bodies and also to the recurrent laryngeal nerve. Drain the wound for twenty-four or forty-eight hours.

Extirpation of the Tear Sac.

This operation so warmly recommended at present is by no means so simple to perform as depicted in the treatises on "Ophthalmic Operations;" nor is it free from possible complications. A recent instance of fatal thrombo-phlebitis of the orbital contents after extirpation of the tear sac, as reported in the *Kilm. Monats. f. Augenhlkde.*, for September, 1913, shows that operators must be very careful, circumspect, and cautious in performing this operation. Many of these apparently hopeless cases of suppuration from the tear sac (dacryocystitis) can be greatly relieved by slitting up the canaliculus, and injecting weak silver nitrate or weak silver salts solution. Such solutions should not be over 2% for the silver nitrate, nor over 5% for the silver salts, owing to the possibility, with stronger solutions, of permanently staining the eyelids or face.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. F. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. I. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Editorial Comment.

The Cocain Law and Some of its Curious Provisions.

Our attention has been called to some provisions of the cocain law which was passed by the legislature of 1913, and has therefore been long enough on the statute books of Maine for physicians to know something concerning them. (See copy of law, page 1793). Upon talking with physicians, we find most of them quite ignorant of the law except that there is such a one. Careful reading of this law confirms our opinion that it is of great value to the State in its endeavor to diminish the number of addicts to cocain and other hypnotics and sedatives. We are willing to agree that it is a wise provision that physicians and druggists should be held strongly accountable for the dispensing of cocain, for instance, in such a way that it cannot be easily or repeatedly obtained, or if obtained, cannot be largely used as a human poison. It is right that physicians should sign their names and the names of patients and the dates of prescribing cocain. There is a certain propriety in demanding, as in the case of all poisons, that a record of them should be kept by the physician directing and the druggist compounding them.

Our attention has been called by druggists to a particular phase of the law. Namely, if a physician writes a prescription containing paregoric, or Squibb's diarrhea mixture and complies with the provisions of the law, the patient can have it filled but once and should he require more it would be necessary for him to go back to the physician. On the other hand, Section 3 specifies that "no person shall

sell, furnish, give away, or deliver opium, morphine, etc." Again it reads, "The provisions of this section shall not apply to sales of cough remedies and other domestic and proprietary preparations, provided that such remedies and preparations are sold in good faith as remedies and not for the purpose of evading the provisions of this act, etc." In other words, any individual can go to a druggist and get paregoric, Squibb's diarrhea mixture, or cough remedies without a prescription while a prescription calling for the same remedies cannot be refilled.

Some questions have arisen in regard to the local application of cocain in operative work in the eye, nose and throat, also hypodermic injections of morphine, codeine, etc. The law reads, "Dispense, furnish, or give away," and apparently this does not refer to direct application. We recommend that the members of the profession carefully read the enclosed copy of the law and file it for future reference.

Artificial Delivery in Albuminuric Retinitis.

German oculists who advise artificial production of labor in the rarer instances of albuminuric retinitis during the pregnancy are finding obstacles in the new German laws against the production of abortion, and are actively discussing amongst themselves just where their duty to their patient conflicts with laws apparently enacted without previous consultation with skilled physicians. Instances of premature delivery in loss of sight from albuminuric retinitis have occurred often, in Maine, and the mother has met with misfortune, but has generally recovered excellent vision, although permanent traces remained in the retina. We are not familiar enough regarding the results to the infant, to know the mortality in that direction. It would seem, however, that it were better to deliver the mother from blindness and convulsions sure to occur, and to give her a chance for another infant, than to concern one's mind with the loss of an infant, pretty sure not to survive, if by any possibility it could be carried to full term, without risking the mother's sight and life also.

(Illinois Medical Journal, Feb. 1914).

Kerosene a Probable Fuel of the Near Future.

Kerosene, owing to its cheapness and the large number of heat units per pound contained, would be ideal fuel if it were not for the fact that it is not sufficiently volatile to start an engine with the ordinary carburetor. Kerosene contains 22,000 heat units per pound, while gasoline contains only 19,200 units. If suitable carburetors are devised, no essential change will have to be made in the present type

of engine for its use, and at the same time more miles per gallon can be obtained than with gasoline.

Disastrous fires are sometimes caused, in fact, very often, by backfiring through the carburetor, and if a pool of gasoline is present under the carburetor, or in the underpan, it is very difficult to save the car. In case of a backfire followed by flames from burning gasoline under the carburetor, the best thing to do is to instantly crank the motor as rapidly as possible, so that it will start, thus drawing the flames back into the carburetor before it has time to melt the connections to the carburetor. A little sand or dirt from the road is then, as a rule, sufficient to extinguish the burning pool which is left.—*Auto Trade Journal*.

Damages Claimed for an Asserted Faulty Mastoid Operation.

Some novel points have turned up in a case of alleged malpractice in a mastoid operation, lately brought against an aural surgeon in a neighboring State. It seems from the claim of the plaintiff, that she, as a minor, was operated on for mastoid disease without permission being obtained from her parents, and without any statement of the need of the operation or of the possible result. This, according to the plaintiff's assertions, seems to have been disastrous, for the hearing is totally destroyed in the operated ear, and a facial paralysis has supervened, so that the tongue and face are paralyzed on one side, and the patient can no longer talk plainly.

The novel points in the suit, from a medical aspect, are, that the defendant has been asked to write in plain commonsense English, just what the mastoid operation is, what were the symptoms seeming to demand its performance, what unusual results ensued, what precautions are usual in the operation to prevent facial paralysis, and whether the defendant, as a skilled surgeon, took all those precautions. Furthermore, he is asked to write in detail all the special education on operations upon the ear which he has ever had in his life, and what connection, if any, he had with the hospital in which the unsuccessful operation was performed.

Damages to the extent of \$15,000 are claimed.

We shall watch this case with interest, not only on account of the contempt which we feel against those who foster needless claims for malpractice, but on account of the unusual requests demanded of the defendant in order that the judge and jury may be able to get a common sense idea of what a mastoid operation really is. Whether any surgeon can make plain to medically uneducated persons the

intricacies of the Mastoid Process, to say nothing of the scientific problems of the operation, seems to us doubtful. For we all know how few surgeons thoroughly understand all of the points involved in the surgery of the Mastoid Process, or more properly speaking, of the Temporal Bone and the adjacent structures and tissues.

The White Slave Trade. Is Its Existence Proved or Is It Merely a Hysterical Exaggeration?

Those who are interested in this question will find a very emphatic paper on the other side, written by a woman for the "English" magazine for June. The author has made extensive investigations in all of the large British cities, and concludes, that instances of this nature are extremely rare, that hardly ever an actual case of capture of a woman has been accomplished against her own inclinations, and that there have been and now are, more boys and men missing from the cities of Great Britain than woman of any and all ages. The author believes that the stir is due merely to the sexuality and hysteria of men, who see in women nothing but weak creatures incapable of self defence.

Noviform.

Twenty years or so have passed since iodoform was discovered and largely used in ophthalmic practice for various suppurative conditions of the eye. But although it was a great advance on any previous methods of treatment, many objections arose against its use from the odor, irritation of the skin and occasional intoxication disturbances. Ever since that time, various remedies to take the place of iodoform, such as dermatol, orthoform, nosophen, formalin, and so on, have been suggested and utilized. All have in some way failed to obtain a permanent place in ophthalmology. The latest remedy in this manner of treatment is noviform, and like all other new things, it is being largely exploited in European hospitals. It is also valuable in local application for surgeons, dermatologists, and gynecologists. Noviform acts as an astringent, absorbent, and dessicator of secretions and finds its use in modern surgery based on those indications.

In eye practice, noviform is indicated in all affections of the eyelids as a powder dusted carefully upon the portions affected. It can be used in the eye in the form of an ointment with vaseline in a strength varying from 1 to 20%, or in olive oil emulsion. Ulcerations and abscesses of the cornea also find in novocain a rapid cure. Obstinate skin lesions at the orifices of the nostrils in ill nourished children, also can be much relieved by the new remedy. Making due allowance for the enthusiasm ever attending the new and unknown, it would seem as if this recent remedy would prove of permanent value in many branches of medicine, as a whole.

New and Non-official Remedies.

Since publication of new and non-official remedies, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Non-official Remedies."

Radium and Radium Salts: Radium Chloride: Radium Sulphate: (Journal of A. M. A., Jan. 3, 1914). Radium Sulphate-Standard Chemical Co., Radium Chemical Co., Pittsburg, Pa.

Sodium Acid Phosphate, M. C. W., The Mallinckrodt Chemical Works, St. Louis, Mo.; Sodium Phosphate, Monobasic, P. W. R., The Powers-Weightman-Rosengarten Co., Phila., Pa. (Jour. A. M. A., Jan. 10, 1914.)

Slee's Refined and Concentrated Tetanus Antitoxin; Slee's Normal Horse Serum. (N. N. R., 1913, and Jour. A. M. A., Jan. 10, 1914). Abbott Alkoidal Co., Chicago, Ill.

Ampoules Emetine Hydrochloride, Parke, Davis & Co., Detroit, Mich. (Jour. A. M. A., Jan. 10, 1914.)

Phenolsulphonephthalein; Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampoules; Sterile Ampoules of Mercury Salicylate; Salvarsan-Ehrlich, Suspension in Ampoules; Neosalvarsan-Ehrlich, Suspension in Ampoules. Hynson, Westcott and Co., Baltimore, Md. (Journal A. M. A., Jan. 24, 1914.)

Elarson. The Bayer Co., New York. (Jour. A. M. A., Jan. 31, 1914.)

Since January 1st, the following articles have been accepted for inclusion with New and Non-official Remedies:

HYNSON, WESTCOTT & Co. Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampoules, H. W. & Co.

H. K. MULFORD CO. Anti-anthrax Serum, Mulford; Antistrep-tococcus, Serum Scarletina, Mulford; Disinfectant Krelon, Mulford; Salicylo; Staphylo-Serobacterin; Strepto-Serobacterin; Typho-Serobacterin.

India Rubber Dermatitis.

This is a form of skin disease lately observed for the first time in various rubber factories in Italy. It is, in fact, what we may call a new industrial disease. It is due to new varieties of rubber lately utilized in the tire industry, and affects the clefts of the fingers, almost exclusively, but is generally relieved by changing the employment.

Propaganda for Reform.

The action of hexamethylenamin. — It has been shown by Hanzlik and Collins that hexamethylenamin can act only in body fluids which are acid in reaction, namely the gastric juice and the urine. The only part of the body in which hexamethylenamin may be expected to exert an antiseptic action is in the urinary tract, and then only if the urine is acid. If the urine is not acid already sodium acid phosphate should be administered to render it so. The administration of sodium or potassium acetate or citrate, in sufficient quantity, will render an acid urine alkaline and inhibit the action of hexamethylenamin. (Jour. A. M. A., Jan. 3, 1914.)

Hydrocyanate of Iron, Tilden. — While from the name one would judge hydrocyanate of iron, Tilden, to be a cyanide of iron, analysis in the A. M. A. chemical laboratory has demonstrated the preparation to consist essentially of equal parts of talc and prussian blue, with traces of organic matter having the properties of alkaloids. Prussian blue is a remedy that has been used for epilepsy and found wanting. (Jour. A. M. A., Jan. 3, 1914.)

The Richie Morphin Cure. — The Richie Company was discussed in Collier's Great American Fraud series as one of the concerns which under the guise of mail-order "cures" for the morphin habit fosters the slavery of the drug habit by substituting for the morphin addiction an addiction to their villainous mixtures of opiates. More recently shipments of the "Richie cure" were seized by the Federal authorities and found on analysis to contain from 7.21 grains to 15.95 grains of morphin sulphate to the fluid ounce. (Jour. A. M. A., Jan. 10, 1914.)

Radium in Carcinoma. — Sparmann reports on the after-history of fifty-three cases of carcinoma treated with radium. Of these eleven have died since the treatment, in six the tumor has disappeared, in five the condition seems improved, in seven the condition is aggravated and in the others the treatment was not continued because the condition of the patients had become worse. While these results show that radium is a remedy of use in the treatment of cancer, it is not a sovereign remedy as some enthusiastic reports would have us believe. (Jour. A. M. A., Jan. 17, 1914.)

You want a larger and better journal

YOU CAN HAVE IT BY WRIT-
ING OUR ADVERTISERS: "I
SAW YOUR AD. IN OUR STATE
JOURNAL."

FAVOR THOSE WHO FAVOR US

Review of Current Literature.

(Surgery, Gynecology and Obstetrics, January, 1914.)

Diagnosis and Treatment of Border-line. Pathological Lesions

By J. C. BLOODGOOD, M. D.

Probably no surgeon of the present day has made a more careful systematic pathological and statistical study of tumors than has Dr. Bloodgood made of the material from the surgical clinic at the Johns Hopkins Hospital. Therefore this first of a series of contributions on the early recognition and appropriate treatment of different pathological lesions is well worth the attention of both the surgeon and the general practitioner.

Dr. Bloodgood sounds a particularly cheerful note when he says that statistics show that people are seeking advice much earlier for the treatment of various forms of external growths. In his experience up to two years ago the percentage of cases of cancer of the breast seeking advice when the lesion was clinically benign was about ten. In the past two years, the number of cases has reached almost 20%.

We are told that the mental attitude of the surgeon today toward mistakes in diagnosis must be changed. He seems to have proved that primary operation for diagnosis followed by a later secondary operation if malignancy is shown in the pathological report is a very dangerous if not fatal mistake. This is, of course, quite an opposite view from that held by many surgeons. To prove the point Dr. Bloodgood gives us the following statistics under tumors of the breast.

The percentage of cures among the cases operated upon by Dr. Halsted and his associates is about forty after five years. When the cases that appeared benign clinically and at operation were considered malignant so that a radical operation followed immediately the exploratory incision, then the percentage of cures rises to about 80. There were 20 cases, however, in which the clinical appearance was benign and the tumor alone excised. In these cases the microscopic examination showed malignancy and some days later a radical operation was performed. Not one of these 20 cases was cured. Dr. Bloodgood believes that the surgeon should be so trained that he can make an immediate diagnosis from the microscopic appearance of the tumor at the time of operation and that while a frozen section may occasionally help, it should not delay the radical operation if indicated.

Dr. Bloodgood discusses in addition to breast tumors the various border-line fibroma, keloids and hemangioma. While a keloid is very

apt to recur itself, he has never seen a malignant tumor develop into a keloid. He has found many cases of angiomas sent in with the diagnosis of sarcoma which proved to be benign. He says that in benign angiomas he has always found remaining some spongy tissue from which the blood could be expressed. This he has not found to be true of sarcomas. Ulceration of any subcutaneous tumor without a history of severe trauma is practically always a sign of malignancy. Haevi, which tend to grow or ulcerate, are particularly dangerous and should be immediately widely excised.

P. P. T.

(Medical Record, Vol. 84, No. XI, Page 466.)

Clinical Studies on the Curative Action of Leucocyte Extracts in Infective Processes.

BY

PHILIP HANSON HISS, JR., M. D., AND JAMES GARFIELD DWYER, M. D.

In this article the authors experimented with leucocyte extracts on infections artificially produced in animals and later on human patients suffering from various infections. The conclusion drawn from these tests was that "The leucocyte extract is an aid in overcoming infections due to such organisms as streptococci, staphylococci, the pneumococcus, meningococcus, and even other infections, in which the leucocytes are not known to play such an important part in the resistance offered by the system to such invasion."

"The method of obtaining these substances as used in animal experiments and the treatment of human subjects is at present as follows: Rabbits, of 1,500 grams weight or heavier, received intrapleural injections of aleuronat. This is prepared by making a 3 per cent solution of starch in meat-extract broth, without heating, and adding to this, after the starch has gone into thorough emulsion, 5 per cent of powdered aleuronat. This is thoroughly mixed, boiled for five minutes and filled into sterile potato tubes, 20 c. c. into each tube. Final sterilization is done preferably in an autoclave. The rabbit injections are carried out by injecting 10 c. c. into each pleural cavity in the intercostal spaces at the level of the end of the sternum, in the anterior axillary line, great care being exerted to avoid puncturing the lungs. The rabbits are left for twenty-four hours, at the end of which time a copious and very cellular exudate will have accumulated in the pleural cavities. After killing the animals, this is removed by opening the anterior chest wall under rigid precautions of sterility, and pipetting the exudate into sterile centrifuge tubes. Immediate centrifugalization before clotting can take place then permits the decanting of the supernatant exudate fluid. To the leucocyte sediment is then added

about 2 c. c. of sterile distilled water, and the emulsion is thoroughly beaten up with a stiff bent platinum spatula. Smears are now made on slides, stained by Jenner's blood stain, and examined for possible bacterial contamination. It is well also to take cultures. Sterile distilled water is then added to each tube, about ten volumes to one volume of sediment, and the tubes are set away in the incubator for seven or eight hours. At the end of this time the sterility is again controlled as above, and further extraction in the refrigerator continued until the extract is used. So far as at present determined, the preparation remains active indefinitely. Before use the preparation is thoroughly shaken to disseminate the sediment, which is then drawn into the syringe and injected along with the fluid into the animal or patient."

Several other men have used the extract in the treatment of various infections with favorable results. In this paper, the author takes erysipelas as an example because "It is an ideal infection to study, as the chief lesion is in plain view and there is usually a sharp temperature reaction in the infection. Moreover, a well-marked train of symptoms, undoubtedly toxic in origin, is generally present, and as the leucocyte extract seems to act primarily, at least in combating toxemia, we have therefore, a comparatively reliable means at our disposal of judging of its effects, both on the lesion and systemic symptoms."

"The series of erysipelas infections treated with the leucocyte extract comprises 148 cases of all types and grades of severity. The majority of cases were secondary to operative measures while the others were of the so-called idiopathic form. As regards severity, they were nearly all severe infections and the majority of them were of the most severe type that occurs." In this paper several cases are reported giving history, treatment and results.

"The results have been uniformly good. In every case there was a marked reaction following its use, which in most cases was shown by a fall in temperature and a rapid improvement in the general condition. In practically all the cases the symptoms disappeared within a few hours following the first injection of the extract; the headache, nausea, and vomiting disappeared, the mind became perfectly clear and from a low, depressed, apprehensive state the patient passed into a state of comparative comfort, free from anxiety. There was a sharp fall in the temperature when the treatment was begun early, more gradual when begun late, although the general condition was just as marked in either case."

"As regards the effect of the extract on the local lesions, there was generally some further spreading, but the character of the lesion changed. The bright, vivid, crimson rash, usually seen in an otherwise

healthy patient, soon ceased to spread and faded. The dull purplish rash seen in the deeper erysipelas infections or in the asthenic type of patient, soon gave way to the bright crimson form, and then faded away gradually."

The following case is selected from those reported by the author as representing one of the types in which the treatment was employed:

"Case V. Patient No. II. Treatment commenced after twenty-seven days. Very late stage. Baby N., aged two years, had always been healthy up to the time she developed double mastoiditis, which necessitated the performance of a double mastoidectomy. Following this the child developed a very severe attack of erysipelas which had its inception at the site of operation and gradually spread until it covered the whole body. The rash would disappear from one spot only to reappear on the same spot in two or three days. The general condition of the child became aggressively worse and no measure seemed to have any effect. Dr. Dwyer was called to this case after the child had thus been infected for three weeks. Fortunately we are able to present the chart of this patient from the beginning of its infection and a study of it will show that the condition was rapidly approaching that of typical septicemia, the daily variations in the temperature curve presaging this termination. A stock vaccine had been used but seemingly without effect. The general condition of the child was extremely serious, its powers of resistance were apparently rapidly being exhausted. The leucocyte extract was immediately injected, as noted on the chart, and the change for the better was so marked in a few hours that the patient did not seem like the same child. The change in the temperature curve is quite well shown and within two hours after the first injection, improvement set in, the rash began to disappear and convalescence was uninterrupted. In this case the change in the condition of the mastoid wounds was very striking, the pale, flabby, unhealthy granulations gave place to bright red, firm granulations, and the healing of the wounds was uneventful. The child was practically free from all symptoms in four days. The change in the condition coincides so markedly with the use of the extract that there can be little doubt of its action in this case."

The average duration of these cases, whether treatment with the extract was instituted early or late, was 3 1-10 days after treatment was begun. The extract took the place of all stimulation, the patients kept comfortable and pulse not over 90.

In postoperative or surgical erysipelas the healing, instead of being delayed as usual, was hastened and was complete in a much shorter time than in an uncomplicated case. This was especially true in mastoid wounds, often avoiding a second operation.

The conclusions drawn are as follows:—“Leucocyte extract will abort infections which are treated with the extract within the first forty-eight hours. It will ameliorate the course of older infections and may abruptly terminate them; the longer the infection has existed the less likely is the latter to take place, but it tends to shorten the course of the disease.

The toxic symptoms, delirium, headache, nausea and vomiting, are modified and relieved; local pain is lessened.

The rash does not disappear immediately but is apt to be localized.

The spreading, intractable lesions of the back and body are apparently affected as readily as those occurring on the face and head.

Pus formation is aborted and sequelæ are rare, if they occur at all. Between 50 and 60% of babies under one year of age have recovered from the erysipelas.”

E. B. F.

Book Reviews.

A Text-Book of the Practice of Medicine.

By James M. Anders, M. D., Ph. D., LL. D., Professor of Medicine and Clinical Medicine, Medico-Chirurgical College, Philadelphia. Eleventh Edition, thoroughly revised. Octavo of 1,335 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$5.50 net; half morocco, \$7.00 net.

The eleventh edition of Anders' Practice of Medicine should be welcomed by the medical profession, because previous editions have given it the undisputed right to be considered a standard work on medicine, and because its author by a combination of large clinical and teaching experience is enabled to obtain a proper perspective of the advances made in medicine and has proven himself equal to the task of sifting the new in the field of symptomatology, diagnosis and therapy, presenting that, which by weight of authority is most likely to assume a valued place in our medical armentarium.

Most physicians have neither the training, the clinical opportunity, and so certainly not the right to constitute themselves as experimental therapists and so do well to fall into the ranks of the well recognized leaders in our profession and tie solidly to that which is good and to look warily on the guerrilla like practices, with their many pitfalls held out so alluringly by the crafty, the irresponsible and the specifically interested whose literary productions at all times litter our mail boxes and whose samples at all times are at our disposal to use and to advertise.

A. E. M.

Progressive Medicine.

A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Lea & Febiger, Philadelphia and New York. Six dollars per annum.

The December number of *Progressive Medicine* is devoted mainly to a discussion of the advances for the year in diseases of the digestive tract, kidneys and genito-urinary organs, and surgery. Under the first heading, Dr. Goodman lays particular stress on the observations in the fields of gastric and duodenal ulcer and auto-intoxication, while in the department of surgery, Dr. Bloodgood gives a splendid review of the work done in surgical shock and his work on bone tumors.

This number is of particular interest to the general practitioner in that it contains the practical therapeutic referendum by Dr. Landis. Here Dr. Landis discusses clearly our most important drugs and vaccines, with their methods of use and present value.

P. P. T.

Pain. Symptoms and Their Interpretation. (Mackenzie.)

In his book, "Symptoms and their Interpretation," Mackenzie has put great stress on the importance of pain as a symptom of visceral disease. "Pain," he says, "is a disagreeable sensation due to stimulation of some portion of the cerebro-spinal nervous system, and referred to the peripheral distribution of cerebro-spinal sensory nerves in the external body wall." The stimulus may arise in area supplied by the sympathetic system. Viscera are insensible to such stimuli as produce pain in area supplied by cerebro-spinal nerves, but stimuli arising in viscera pass along the sympathetic nerve to its center in the cord and there, if of sufficient intensity, excite the neighboring cells of the cerebro-spinal system to activity. A sensory nerve thus stimulated gives the sensation of pain in the parts to which it is distributed. The greater the stimulus from the sympathetic system even though arising from a small area, the larger the number of cerebro-spinal nerves stimulated. This explains the phenomenon of radiating pains from visceral disease. The more distinct pains are usually the less severe and are the first to disappear under a whiff of chloroform. So called visceral pain then, is referred to the sensory nerves of the body wall. In the abdominal wall there are three sensitive layers, skin, muscle, and the loose connective tissue outside the peritoneum. These structures may be rendered exquisitely sensitive to stimuli in visceral disease. In demonstrating a "tender organ" then, we are simply demonstrating the irritability of the sensory fibres in the wall.

It has been amply demonstrated in operative procedures without

anæsthesia that trauma to the viscera cause no pain at the site of the stimulus. The exception of the testicle is only apparent. The localized pain in the testicle on pressure is due to stimulation of a sensory spinal nerve in the tunica vaginalis (genital branch of genito-crural). Mackenzie says, "the tunica vaginalis is the only sensitive serous membrane covering an organ that I have detected and it is the only one to which a branch of a cerebro-spinal nerve has been traced." The sensation of faintness and pain referred to the groin is a true viscerosensory reflex.

Pain is often diffused over a wider area than that occupied by the organ in which the stimulus producing the pain originates, for instance, the pain of angina pectoris passes from the chest to the left axilla and arm, that is to say into area supplied by contiguous nerve roots (1-2-3 dorsal). Thus from the distribution of the phrenic nerve and its intimate association of cervical nerves, patients of diaphragmatic pleurisy or basal phenomena may have severe pain on the top of the shoulder. Likewise the pain of renal colic may radiate to the testicle.

There is nothing in the pain resulting from a viscerosensory reflex to distinguish it from pain caused by direct stimulation of a cerebro-spinal sensory nerve. Thus a patient in pain from visceral disease may be treated for neuritis, neuralgia, or rheumatism.

The viscerosensory reflex accounts for the definite areas of cutaneous hyperalgesia, muscular hyperalgesia, also hyperalgesia of testicles, mammae, and occasionally for tender vertebræ, when the true lesion is visceral.

Symptoms such as vomiting, dyspnea, disturbances of secretory function, of cardiac action, of vasomotor and pilomotor activity are often true organic reflexes—the stimulus arising in a diseased organ at some distance from the organ whose function is disturbed.

Visceral pain then, is referred pain and is not felt in the region where the painful stimulus occurs, while pain due to stimulation of peripheral nerves is direct and is felt at site of the stimulus. Tenderness and spasms of the abdominal wall in visceral disease demonstrate true viscerosensory and visceromotor reflexes, and are not necessarily caused by diseased viscera immediately beneath. Visceral disease then creates irritable foci in the cord and to quote Mackenzie, "In many cases of visceral disease nearly the whole of the symptoms present are really due to stimulation of a limited portion of the central nervous system." It is in consequence of the diversion of nerves and the displacement of organs (during development) that the symptoms arising from a viscus may be exhibited at some considerable distance from the situation of that viscus.

C. M. R.

Essentials of Nervous Diseases and Insanity.

By John C. Shaw, M. D., late Clinical Professor of Diseases of the Mind and Nervous System, Long Island College Hospital. Fifth edition, thoroughly revised, by Louis Casamajor, M. D., Chief of Clinic, New York Neurological Institute. 12 mo. of 187 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1913. Cloth, \$1.00 net.

The term "Question Compend" as used in connection with the title of this book would seem almost a misnomer. Instead of questions and answers being given as in the older form of compend, summaries of the more important forms of nervous and mental diseases are made in respect to etiology, symptoms, pathology, anatomy, diagnosis, prognosis and treatment: although, as the author states, "The question of diagnosis has not been entered into fully as it is believed that a knowledge of these diseases must precede a clear appreciation of their differential points."

The symptomatology is in places well set forth, although the subject of neurology is not perhaps particularly well adapted to this kind of review.

To quote from the preface — "This little book is not intended to take the place of the larger and more complete works, but to be used somewhat as a primer—for advanced students." H. M. S.

Dorland's American Illustrated Medical Dictionary.

A new and complete dictionary of terms used in medicine, surgery, dentistry, pharmacy, chemistry, veterinary science, nursing, biology and kindred branches; with new and elaborate tables. Seventh revised edition. Edited by W. A. Newman Dorland, M. D. Large octavo of 1,107 pages, with 331 illustrations, 119 in colors. Containing over 5,000 more terms than the previous edition. Philadelphia and London; W. B. Saunders Company, 1913. Flexible leather, \$4.50 net; thumb indexed, \$5.00 net.

To those physicians who are acquainted with the previous editions of this work, this volume needs no introduction. Its many new terms, numerous illustrations, and other valuable features make it a dictionary that should be on the table of every physician, and we heartily recommend it to all who want an up-to-date medical dictionary.

The Practitioner's Visiting List for 1914.

An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The weekly, monthly, and 30 patient perpetual

contain 32 pages of data and 160 pages of classified blanks. The 60-patient perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, post-paid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular, showing the several styles, sent on request.

Lea & Febiger, Publishers. Philadelphia and New York.

Diagnosis and Treatment of Syphilis, the Wassermann Reaction and Ehrlich's "606" (Salvarsan).

By C. H. Browning, M. D., Lecturer on Bacteriology in the University of Glasgow, and Ivy McKenzie, M. D., Director, Western Asylums' Research Institute, Glasgow. Octavo, 293 pages. Cloth, \$2.50 net. Lea & Febiger, Publishers.

This volume explains the principles, methods and clinical application of Wassermann's reaction, and the treatment of syphilis with Salvarsan, giving the methods of its administration, and an instructive review of their own cases.

International Clinics.

A quarterly of illustrated clinical lectures, and especially prepared original articles. Edited by Henry W. Cattell, A. M., M. D. J. B. Lippincott, publishers, Philadelphia.

In this volume of International Clinics every practitioner will find something of value among the following subjects: Under diagnosis and Treatment are discussed Therapeutic Application of Mechanical Vibration; Static Electricity: Its Physical and Physiological Effects and Therapeutic Indications; Newer Methods in the Treatment of Neuritis; the Management of Common Forms of Poisoning; and Augmented Blood-Pressure.

Under medicine we find Azurophile Micro-Organisms; The Diagnosis of Extensive Pulmonary Tuberculosis in Obscure Cases; Factors in the Clinical Physiology of the Heart.

Under Neurology are discussed the following: Interpretation of Dreams, Based on Various Motives; Neurotic Discomfort and the Law of Avalanche; the Psyche in Diagnosis; Syphilis of the Pons, Medulla and Upper Spinal Cord.

Traumatic Lipæmia and Fatty Embolism; Interesting Surgical Cases; Gunshot Wounds; and the Treatment of Hemorrhoids are taken up under Surgery.

Under Eugenics, we find two subjects, namely Constitutional Immorality; and Shall the Deaf-mute Remain Dumb or Shall the Dumb Speak?

County News.

CUMBERLAND.

The thirty-first regular stated meeting of the Cumberland County Medical Society was held Thursday evening, Feb. 19th, at the Congress Square Hotel, Portland. One hundred and fifteen physicians were present.

Dr. John A. Witherspoon, the President of the American Medical Association, had planned to be the guest of the Society but illness in his family forced him to cancel such arrangement. Dr. John E. Goldthwaite, a prominent orthopedist of Boston, was the speaker of the evening. He gave a very valuable and interesting address, his subject being, "The Importance of a Proper Understanding of the Adjustment of the Viscera in the Interpretation of Medical and Surgical Conditions." His talk was illustrated by many excellent pictures and drawings.

The secretary read the following letter from Androscoggin County:

My Dear Doctor:—

On Friday evening, February 27, Androscoggin County Medical Society will hold a special meeting at which Dr. Henry L. Coyt and Mr. Francisco, both experts on the subject, will speak on the subject of pure milk.

The meeting will be held at the Chamber of Commerce rooms, 24 Lisbon St., and a banquet will be served following the meeting. We are instructed to extend to the Cumberland County Medical Society an invitation to come to this meeting. Tickets, \$1.50.

DR. S. E. SAWYER,

Lewiston, Me.

A communication from the Penobscot County Medical Association was read, presenting in printed form a set of resolutions enacted by this society, relative to the Augusta State Hospital episode. These resolutions were to show and express the society's disapproval of the treatment accorded Dr. H. W. Miller, the late superintendent and to approve the stand taken in the matter of Dr. S. C. Gordon of Portland. On motion of Dr. Gilbert, it was voted that the Cumberland County Medical Society formulate a new set of resolutions of a similar nature and that a copy should be sent to each county society and to the Maine Medical Journal. Drs. Warren, Gilbert and W. B. Moulton were appointed a committee to form the resolutions, as follows:—

Resolved, that we, members of the Cumberland County Medical Society, herewith unite with other members of the medical profession in this State in disapproval of the late action of the Governor and Council of this State, in the removal from his office of Dr. Henry W. Miller, late superintendent of the Augusta State Hospital and of our colleague, Dr. S. C. Gordon of Portland, Me., late member of the Board of Trustees for the State Hospitals and School for Feeble Minded.

F. Y. GILBERT,
W. B. MOULTON,
STANLEY P. WARREN,
Committee.

Dr. George B. Swasey of Portland, reported the progress made by the Cancer Committee of the Maine Medical Association, and stated the plans made for public instruction in this subject.

The president appointed Drs. S. C. Gordon, J. F. Thompson, and H. E. Milliken as a committee on Public Health and Legislation. As a committee in charge of the arrangements for the annual meeting of the Maine Medical Association, the chair appointed Drs. Drummond, M. C. Webber and E. E. Holt, Jr.

It was voted that a vote of sympathy be sent to Dr. John A. Witherspoon, because of the illness of Mrs. Witherspoon and the coincident loss of his home by fire.

After the scientific session, a buffet lunch was served in the dining room, at which time the members were entertained by a vaudeville duo and an excellent sleight-of-hand performance.

A. P. LEIGHTON, JR.,
Secretary.

PORTLAND MEDICAL CLUB.

The second regular meeting of the year was held at the Columbia Hotel on Thursday evening, February 5th.

The paper was by Dr. Frank Y. Gilbert on "Conservation of Vision," this being one of a series of similar papers gotten up on lines suggested by the American Medical Association, which are to be delivered to the medical profession and to laymen throughout the State. The lecture was generously illustrated with lantern slides, and evoked much interest in the thirty-two members who were present.

Mr. Millard W. Baldwin, superintendent of the Maine School for the Blind, who was present as a guest of the club, gave a highly interesting account of the work being done at the school under his direction, and greatly surprised most of the members by his recital of what blind people can do to make themselves self-supporting.

ROLAND B. MOORE, *Secretary.*

KNOX.

The regular meeting of the Knox County Medical Society was held at the Hotel Thorndike, February 10th, President Adams presiding.

Supper was served at 6 o'clock, after which Dr. E. B. Silsby read a paper on "The Old and the New." The paper explained why the old family physician is almost a thing of the past and gave reasons for the existing condition of affairs.

The paper was discussed by Drs. Hart, Foss, Adams, Judkins and Frohock.

The next meeting will be held in April and we expect to have the pleasure of having Dr. Peters with us.

H. W. FROHOCK, *County Editor.*

YORK.

The next meeting of the York County Medical Society will be held April 2nd, at Kennebunk. Dr. Addison Thayer of Portland will be present and give a talk on the Bowdoin Medical School.

A. L. JONES,

County Editor.

Clinical Observations with

RADIUM

IN A SERIES OF SUB-ACUTE AND CHRONIC FORMS OF

ARTHRITIS AND NEURITIS

Show a Large Percentage of Recoveries and Improvements

RADIUM CHLORIDE—Supplied in proper form for use, intravenously, in Radium Drinking Water, Radium Bath Water and inhalatoriums.

RADIUM SULPHATE—Supplied in the form of a mixture of radium sulphate and barium sulphate for use in applicators.

We Guarantee the Radium Element Content of Our Products.

Prescriptions filled in our laboratories only. Prices will permit of use in general practice.

RADIUM SALTS furnished in any purity desired.

Full literature and clinical records upon request

RADIUM CHEMICAL COMPANY, Pittsburgh, Pa.

Our Radium Chloride and Radium Sulphate (Standard Chemical Company) have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association. See *Journal American Medical Association*, January 3, 1914, page 41.

Medico-Legal.

CHAPTER 211.

An Act to regulate the sale of morphine and other hypnotic or narcotic drugs.

Section 1. No person, firm or corporation shall manufacture any so-called catarrh powder or catarrh cure, or any patent or proprietary preparation containing cocaine, or any of its salts, or alpha or beta eucaine, or any of their salts, or any synthetic substitute for them.

Section 2. No person, firm or corporation shall sell, or expose or offer for sale, or give, deliver or exchange cocaine, or alpha or beta eucaine, or any synthetic substitute for them or any preparation containing the same, or any salts or compounds thereof, except upon the written prescription of a physician, dentist, or veterinary surgeon, registered under the laws of the State in which he resides, which prescription shall be dated and bear the name of the person giving it and of the person prescribed for, and the original prescription shall be retained by the druggist filling the same for at least two years and shall not again be filled, except upon the written order of the original prescriber, and shall at all times be open to inspection by members of the State Board of Health, members of the State Board of Pharmacy, and their authorized agents, by State Officials and their authorized agents, and by the police authorities and officers of cities and towns. But no practitioner of veterinary medicine shall prescribe any of the above mentioned substances for the use of a human being.

Section 3. No person shall sell, furnish, give away or deliver opium, morphine, heroin, codeine, cannabis indica or cannabis sativa, or any salt, compound or preparation of said substances except upon the written prescription or order of a lawfully authorized practitioner of medicine, dentistry or veterinary medicine, which prescription shall be dated and shall bear the name of the person giving it, and the name of the person prescribed for; which original prescription shall be retained by the druggist filling the same for at least two years, and shall not again be filled except upon the written order of the original prescriber. Such prescriptions shall at all times be open to inspection by members of the State Board of Health, the State Board of Pharmacy, State officials and their duly authorized agents, and by the

police authorities and officers of the cities and towns. But no practitioner of veterinary medicine shall prescribe any of the above substances for the use of a human being. The provisions of this section shall not apply to sales made by a manufacturer, or wholesale or retail druggist; nor to sales made to hospitals, colleges, scientific or public institutions, or to physicians, dentists, or veterinary surgeons; not to the sale of cough remedies and other domestic and proprietary preparations provided that such remedies and preparations are sold in good faith as medicines, and not for the purpose of evading the provisions of this act, and provided further that such remedies and preparations do not contain more than two grains of opium, or one-half of a grain of morphine, or one-fourth of a grain of heroin, or one grain of codeine or their salts, in one fluid ounce, or, if a solid preparation, in one advoirdupois ounce; but such provisos shall not apply to liniments and ointments which are prepared for external use only. Nor shall the provisions of this section apply to preparations containing opium or any of its salts, which are sold in good faith as remedies for diarrhœa, cholera or neuralgia, nor to powder of ipecac and opium, commonly known as Dover's powders, provided that any such preparation is sold in good faith as medicine and not for the purpose of evading the provisions of this act.

Section 4. No practitioner of medicine, dentistry or veterinary medicine shall prescribe for the use of an habitual user of the same, opium, morphine, heroin, codeine, or any salt or compound of the said substances, or any preparation containing any of the said substances or their salts or compounds, or cocaine or its salts, or alpha or beta eucaine or their salts, or any synthetic substitute for them, or any preparation containing the same or any salt or compound thereof; nor shall any practitioner of dentistry prescribe any of the said substances for any person not under his treatment in the regular practice of his profession; nor shall any practitioner of veterinary medicine prescribe any of the substances for the use of a human being; provided, however, that the provisions of this section shall not be construed to prevent a lawfully authorized practitioner of medicine from prescribing for the use of any habitual user of hypnotic or narcotic drugs, who is under the professional care of such practitioner, such substances as he may deem necessary for treatment, if such prescriptions are given in good faith, and not for the purpose of evading the provisions of this act.

Section 5. A manufacturer or jobber of any or all of the drugs enumerated in sections two and three of this act, a wholesale druggist, or a registered pharmacist may sell any drug mentioned in said sec-

tions two and three to a manufacturer, jobber, wholesale druggist, or to a pharmacist, physician, veterinarian, or dentist qualified to practice under the laws of this State, or to an incorporated hospital, but only upon a written order duly signed by such manufacturer, jobber, wholesale druggist, registered pharmacist, registered physician, registered veterinarian, registered dentist, or the superintendent of such incorporated hospital, which order shall show the article or articles ordered and the date of delivery. The said order shall be kept on file in the laboratory, warehouse, pharmacy or store from which it was filled by the proprietor thereof, or his successor, for a period of not less than two years from the date of delivery, and shall at all times be open to inspection by officers of the State Board of Health, members of the State Board of Pharmacy, or their authorized agents, State officials and their authorized agents, and the police authorities and officers of cities and towns; and such order shall not contain items of any drug not mentioned in sections two and three of this act.

Section 6. A person not being a physician, dentist or veterinary surgeon, qualified to practice in this State, or not being a manufacturer or wholesale or retail dealer in drugs, who has in his possession opium, morphine, heroin, codeine, cannabis indica, cannabis sativa or any other hypnotic or narcotic drug or salt, compound or preparation or said substances, cocaine, alpha or beta eucaine or any synthetic substitute for them, or any preparation containing the same, or any salts or compounds thereof, except by reason of a prescription of a physician, dentist or veterinary surgeon qualified to practice in this State, shall be punished as provided in section eight of this act. The provisions of this section shall not apply to a person, firm or corporation while transporting any of the above mentioned drugs from or to a manufacturer or jobber, wholesale druggist, registered pharmacist, registered physician, registered veterinarian, registered dentist, or incorporated hospital, nor to persons who may have the above mentioned articles in their possession in connection with the enforcement of the provisions of this act or with the trial of cases arising thereunder. Possession of any of the drugs mentioned in this section shall be *prima facie* evidence that such possession is unlawful.

Section 7. No practitioner of medicine, surgery, dentistry or veterinary medicine shall dispense, furnish or give away opium, morphine, heroin, codeine, cannabis indica, cannabis sativa, or any salt compound of said substances or any preparation containing any of the said substances or their salts or compounds, or cocaine or its salts or alpha or beta eucaine or their salts or any synthetic substitute for them, or any preparation containing the same or any salt or compound

thereof except in good faith as medicines for diseases indicated; and the aforesaid practitioners shall keep a record in a book kept solely for that purpose of the name and address of the patient treated, the name of the disease indicated and the quantity of the drug dispensed, furnished or given away on each separate occasion, which record shall be made within forty-eight hours of the dispensing, furnishing or giving away, and shall be preserved for at least two years, and shall at all times be open to inspection by members of the State Board of Health, members of the State Board of Pharmacy or their authorized agents, by State officials or their authorized agents, or by the police authorities or officers of cities and towns. But no practitioner of medicine, surgery or dentistry shall dispense or prescribe, except for his own professional use, more than four grains of morphine, cocaine, heroin, opium or any other hypnotic or narcotic drug, their salts, compounds, or any preparation of the same, unless it be for a chronic, incurable, or malignant disease.

Section 8. A person who violates a provision of the foregoing sections, or aids or abets another in the violation thereof, shall be fined not more than one thousand dollars nor less than fifty dollars, or be imprisoned not more than one year, or both. Judges of the municipal and police courts and trial justices shall have original and concurrent jurisdiction with the superior and supreme courts of offenses under this act.

Section 9. The director of the Maine Agricultural Experiment Station shall make a chemical analysis to determine the composition and quality of any substance mentioned in this act on application of the county attorney of any county in Maine, and shall furnish a certificate certifying to the composition or quality thereof. The certificate under seal of the Maine Agricultural Experiment Station which shall be affixed by the chemist thereof making the analysis, shall be prima facie evidence of the composition and quality of the substance analyzed.

(Approved April 12.)

WANTED— A steady, reliable physician in a country village on railroad and State highway. One acquainted with country practice and conditions. A good rent free for one year. Village has always had a resident doctor until within a short time. Practice worth from \$2,000 to \$3,000 per year.


For particulars write **D X, Journal Office.**

Personal News and Notes.

During the past month, Dr. A. E. Brown of Bangor read a paper at the University of Maine at Orono on "Conservation of Vision," and Dr. C. E. Norton of Lewiston read a paper on the same subject at Bates College.

Dr. John B. Thompson of Bangor has returned from Chicago where he represented the Maine Medical Association at the Conference of State Secretaries, held under the auspices of the A. M. A., and also acted in the behalf of the Journal at the editors' meeting held at the same time.

Dr. C. B. Sylvester of Harrison has returned after a few weeks spent in visiting the hospitals of New York, Philadelphia, Baltimore and Washington.



Tested
professionally—
Approved professionally.
**Exceptionally
Palatable,
Digestible, Dependable.**

Physicians have been able to prescribe to advantage

Hydroleine

in cases in which cod-liver oil is indicated. Hydroleine is pure Norwegian cod-liver oil emulsified in a manner which makes it extremely utilizable. It is without medicinal admixture. Sold by druggists.

THE CHARLES N. CRITTENTON CO.
115 Fulton Street, New York

Sample will be sent to physicians on request.

Dr. S. E. Fisher of Portland is on a ten days' trip to Southern Pines.

Dr. Walter Gilbert of Calais has returned from a short stay in Jacksonville, Florida.

Dr. Felix Barrett of Westbrook, who is just recovering from a serious illness, is spending the month in Southern Pines.

Dr. and Mrs. H. A. Owen of Bar Mills have been visiting in Chicago, Ill., where Dr. Owen resided at one time.

Dr. A. C. Maynard of Biddeford left the first of March for a course of study at the Postgraduate Medical School and Hospital of New York City, after which he will resume his practice in Biddeford.

Dr. and Mrs. John D. Carty of Kittery Point moved into a newly built residence in that town early in February.

The property of Ex-Mayor G. L. Crosman of Saco has been purchased by Dr. Jesse D. Haley of that city, the deeds having been passed February 21. This is one of the finest residence properties in Saco and is centrally located on Main Street. Dr. Haley will move into his new home in the spring, at which time the Crosmans will move to Portland. Dr. Haley's residence on Cutts Avenue was recently sold to the Free Baptist Church society for a parsonage.

Dr. Samuel Freeman, for more than a half century a resident of Chelsea and Everett, Mass., died Friday, February 20, at his home in Everett, aged nearly 84 years. He was born in Limerick, Me., March 17, 1830, and went to Boston in 1857 as assistant port physician. A year later he opened a drug store on Broadway, near Fifth St., Chelsea, the business now being conducted by his son, Charles W. Freeman. He was graduated from Bowdoin College with degrees of A. B., in 1854; M. D., '57; and A. M., '59. In 1867, Dr. Freeman represented Chelsea in the legislature and was overseer of the poor in that city for a short time. He is survived by his wife, Mrs. Annie A. Freeman; two sons, Charles W. of Chelsea and Dr. George F. Freeman, U. S. A., and five grandchildren. His funeral was held Sunday, February 22. Burial was at Limerick. Of the 39 graduates of the class of 1854, only 7 survive and of the medical class of 1857, which had 14 members, there are now three living.

ANNUAL MEETING, PORTLAND, JUNE 10 & 11

THE JOURNAL OF THE Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

APRIL, 1914.

No. 9

NEISSER INFECTION OF FEMALE GENITALS IN RELATION TO PREGNANCY.*

BY ERNEST BOYEN YOUNG, M. D., BOSTON,

Junior Visiting Physician for Diseases of Women, Boston City Hospital; Assistant in Gynecology, Harvard Medical School.

The subject of the paper this evening is much too broad for the time at my disposal, and therefore many interesting phases must be left untouched.

To one connected with the Gynecological Department of a large public hospital, the frequent appearance of active venereal disease and its end results may give an exaggerated idea of its prevalence. Even if this be true, its ravages are only too evident, and aside from those young women who acquire it through indiscretions and waywardness, many wives and mothers contract this disease innocently, to visit it in turn upon their children.

In fact, women of all classes, even those who know of its existence, apparently have little idea of its symptoms and the serious consequences which follow infection. While males may be said to have some knowledge as to its effect upon themselves, they possess little or no idea of the unhappy consequences in the females whom they themselves infect.

*Read at Bangor, January 20, 1914.

The exact extent of the prevalence of gonorrhœa in either sex must be a matter of conjecture. Even where laws are in force requiring venereal diseases to be reported, it is far from probable that more than a small proportion are known to the health authorities.

In the female, mild attacks are unrecognized, and the natural reticence of the sex tends to keep many cases hidden. No disease is probably so widespread, with the exception of measles. Practically all prostitutes acquire it at some time in their career, either in acute or chronic form, and it has been estimated that of the 40,000 women of this class who die yearly, 30% die from gonorrhœa or its ultimate effects. Deaths due to gonorrhœa come, as a rule, under other headings in mortality tables, but one has only to visit our large hospitals to realize that the so-called "race suicide" is due in part to its prevalence.

At the same time, one may also be convinced that 50% of the pelvic inflammatory disease is due to the same cause. Price estimates that 90%, Norris 80%, Clark 50%, Robb 25%, Davis and Noble 5-10%, of all pelvic inflammations are gonorrhœal in origin.

On the Gynæcological Service at the Boston City Hospital in 1905, about one-half the abdominal operations were for salpingitis.

Figures will naturally vary considerably in the different strata of society. Among the educated classes, the number decreases, as the males who contract gonorrhœa receive better treatment and appreciate more fully what may happen to those who remain uncured. The women, likewise, are less exposed to the temptations which come from crowded tenements and poor moral surroundings.

At the Illinois State Training School for Girls, 55% were infected at the time of admission. Doctors Hunner and Harris in 1895 stated that over 80% of the middle classes in England suffered from gonorrhœa at some time during their lives.

The Washington State Medical Association asserts that 80% of all men in large cities have had gonorrhœa once or several times, 45% infect their wives, 80% of all operations upon women for diseases of the uterus and adnexa are caused by gonorrhœa, and that 20% of all blindness results from the same source.

Computed on a basis of 8% of infection among married women, Morrow estimates 250,000 infected women in the United States, and also says that venereal diseases have a morbidity twice as large as all other acute and chronic diseases. He further estimates 1,500,000 men are infected annually.

In Baltimore during 1906, there were treated 9,450 cases of venereal disease, compared with a total of 3,310 cases of infectious

diseases, and in New York, in 1911, it was estimated that there were 800,000 persons suffering from gonorrhœa.

The Surgeon General of the U. S. Army reported in 1904 that 30% of non-efficiency, 19% of hospital admissions and 15% of all discharges from the service resulted from venereal disease. The amount of venereal disease in any army is said to be about equal to that of the people among whom they are stationed. These few figures show the prevalence of venereal disease.

Luckily, gonococci have little resistance, and soon perish outside the body; otherwise the disease would be more widespread. Drying soon kills them, but at the same time they may exist for long periods in thick smears, where moisture is present, and different strains vary in their power of resistance. This lack of resistance in the organism renders infection, without sexual intercourse, comparatively rare, and, as it grows—with a few exceptions—on columnar epithelium, it must be planted upon proper soil soon after discharge from the infection source. Abrasion of the mucous membrane is not necessary, and the number of the organisms is probably not so important as their varying virulence and the susceptibility of the individual.

There seems reason to believe that an acute gonorrhœa may produce an acute process; a chronic, a chronic process in another individual, and likewise in several persons, infected from the same source, the disease may have similar characteristics. As illustrating the last point: Ahmann inoculated a normal urethra with blood from a case of gonorrhœal septicæmia and in addition to the urethritis, the patient developed a general gonorrhœal infection.

Some writers believe that during the first infection the local symptoms are more acute; while with subsequent infections, local manifestations are less acute, but there exists a greater liability to the various metastatic processes.

The parts most liable to infection in women are the urethra, cervix and vulvo-vaginal glands, and the seat of infection depends upon the condition of the parts. If, for instance, the introitus is small or the hymen present and there is difficulty in entering the vagina, the discharge may be deposited about the entrance, whereas if the vagina is easily entered, the cervix is often the first seat of disease. Under the latter condition, the urethra and vulvo-vaginal glands may escape entirely, or become infected later from the cervical discharge. For the reasons noted above, the infection in children, young girls and newly married women, from rape and incomplete coitus, often begins about the external genitals. Again, the passing of urine or the use of a vaginal douche directly after coitus may determine the seat of the infection.

Immediately following the menstrual period, the female is peculiarly liable to receive and likewise to transmit the disease. This is said to be due to the diminished acidity of the vagina from the menstrual flow and the consequent increase in the number of organisms. It is at this time that tubal disease usually first manifests itself.

In chronic or latent gonorrhœa, we deal with a subject very important in both sexes. This means that the organisms have established themselves in some localities beneath the mucous membrane or in the deeper recesses of glands, and are not on the surface or in the discharges. Under such conditions, sexual intercourse may continue for sometime without untoward results; but as great bodily exertion, drinking and excesses of various kinds tend to awake these dormant foci, intercourse during or after such excesses is apt to result in its transmission to others.

Persons with a chronic process occasionally seem to be somewhat immune, and may cohabit with other infected individuals without an acute attack. A husband and wife may become immune to a strain which they harbor, but each retain the ability to infect others.

Wertheim, having obtained cultures from a case of two years' duration, was unable to inoculate the same urethra from the culture, but by passing the culture through a second individual, he was able again to inoculate the first. This explains how a husband may infect his wife and in turn suffer re-infection—or vice versa. Latent gonorrhœa is prone to cause situations in the family which are extremely difficult to untangle.

Gonorrhœal infection of the genitals in infancy and childhood is usually accidental, but from 4% to 85% of all cases of vulvovaginitis in young children are said to be due to this cause, the figures varying in different institutions. In infants it may be acquired during the birth through infected passages, and is probably more frequent than would be suspected—some cases having been reported with ophthalmia neonatorum as well. Epidemics among young children in asylums are not uncommon, and here as elsewhere, due to infected cloths, towels, thermometers, etc. Skutch reported an epidemic during which 236 girls contracted the disease in a public bath in Germany.

The vagina and vulva are most often attacked, and the cervix and urethra may be involved. It may also occasionally cause peritonitis and general infections. I have seen two cases of peritonitis, both of which recovered. Outside of institutions, it is not uncommon among the lower classes, and Pott, in a series of cases, found that 90% of the mothers of children with vulvovaginitis had leucorrhœa. Instances of this nature are not at all infrequent, and but a short time ago a mother visited our clinic who had acquired gonorrhœa from her

husband, and in some manner transmitted it to her two small children.

At a later age, the infection may come from toilet seats, towels, sleeping with those already diseased, and precocious sexual intercourse. From time to time little girls appear at our clinic, infected by men laboring under the superstition that in transmitting the disease to a virgin they will become cured. Such cases are not rare, but more frequent among our foreign population. Precocious sexual intercourse, while uncommon, is not unknown, and during my term as interne at the Children's Hospital, I knew a boy of 4 or 5 years who contracted gonorrhœa from a girl of six.

From ten to twelve years and onward, it is generally acquired through coition.

The severity of the Neisser infections of childhood is variable; some being of a mild type and others acute, with great pain, swelling, and excoriation of the genitals. Urethritis is present in some and if absent there is much irritation from the urine. Occasionally condylomata appear, but so far as my experience has gone, metastatic processes are rare.

The symptoms during pregnancy do not materially differ from those at other times and are too well known to need consideration. It may be well, in passing, to mention their tendency to increase at this time and to call attention to the fact that vulvo-vaginitis, while usual in children, owing to the delicate mucous membrane, is unusual in women after repeated sexual intercourse. It does occur, however, in women recently deflorated, and increased vaginal discharge, in the uncleanly, causes condylomata. Prochibis is also a fairly frequent complication.

What is said here in reference to diagnosis applies for the most part equally to the non-pregnant and pregnant state. Diagnosis, while relatively easy in the acute form, or where tubal disease is present, may be very difficult or impossible in the sub-acute or latent stage, in which patients are generally seen. Women are not apt to seek medical advice about genital disorders until driven to do so by continued discomfort. A large number are accustomed to have an increased quantity of vaginal discharge at certain periods; especially those who have borne children or have some disturbance of the genito-urinary organs due to malpositions or lacerations. Likewise many have burning micturition from concentrated urine, and as it has always disappeared on former occasions, they take no heed until the process is well-advanced. To those who are not pregnant, unusual pelvic pain, especially at the menstrual period, or increased flow, does not create immediate distrust.

The symptoms are often evanescent, and after a period during

which the patient considers herself well, she seeks her physician, complaining of leucorrhœa, continued slight burning or tickling when passing water, and possible increased pain or a more profuse menstrual flow. Increased flow, pelvic discomfort, and a stringy discharge means that the uterus, or at least the cervix, is infected. The process may subside and proceed no farther; but sooner or later there is apt to be an acute attack of pelvic pain, in most cases immediately following the monthly sickness. The last-mentioned means tubal infection. The absence of obvious signs and lack of symptoms in the pregnant or non-pregnant state does not necessarily mean that ability to infect others is wanting. Even in apparently undoubted cases, examination of many slides may be unavailing. In such instances, however, careful inspection may reveal the reddened crypts about the vestibule, slight inflammation about the ducts of Skene or the glands of Bartholin, and careful milking of the urethra furnish some pus. A red external os with thick purulent discharge is always suspicious.

For examination a patient should appear before urinating or douching. Smears should be taken from the urethra, cervix, vulvo-vaginal glands and crypts,—in the non-pregnant immediately after the menstrual period. The urethra should be stroked forward, and by this means pus may be made to exude from it and ducts of Skene. The cervix should be wiped clear of mucus, pressed to free secretion from the glands, and, with a firm instrument, a smear obtained from far up in its cavity. The secretion from the crypts and Bartholin's glands may also be obtained by pressure. If these means fail, the application of some irritant to cervix and urethra and the examination of the secretion obtained 24 hours later, may furnish positive results, as this causes an increased secretion from the parts, and the organisms are found in greater numbers.

It is well to remember in all cases, and especially in children, that vulvo-vaginitis may occasionally appear from uncleanliness, changes in the urine and from infection with organisms other than the gonococcus.

A short time ago a young woman consulted a physician on account of a profuse discharge which came on during pregnancy and which had the appearance of gonorrhœa. Bacteriological examination proved that it was not a Neisser infection. The occurrence of such cases should make physicians very careful in diagnosis and statements, and without the finding of intracellular diplococci, one should be guarded as to what his words might imply. We may testify in court that a case of vaginitis or urethritis, in the discharge from which diplococci are found corresponding in appearance and staining reaction with the Neisser organism, is clinically gonorrhœa, but without culture growth it is not proof positive.

For the past few years the complement-fixation test and diagnostic vaccination have received considerable attention as aids in doubtful cases.

The complement-fixation test is of value only in the hands of skilled workers, and is not always reliable. A positive reaction is supposed to indicate a focus of disease; but a negative test does not necessarily mean that cure has been effected. As enough toxin must be formed to cause the tissues to respond to the invasion, the reaction is seldom present before the third or fourth week of the disease. It is sometimes wanting when gonococci are found; it may persist in chronic cases after the disease is apparently cured; and finally, may be absent in cases of long standing where the disease is uncured.

It is necessary that the results should be properly interpreted. For instance,—in an apparently cured case—a strongly positive reaction would mean a focus of disease somewhere in the tissues; while under similar circumstances, a weakly positive reaction might have no significance, as we know that there is often a response to the reaction after the gonococci have perished.

It is of more value in the vulvo-vaginitis of children and in chronic cases, especially in joint disease.

The skin reaction after vaccination with the dead gonococci, much after the manner of the skin reaction for tuberculosis, is also considered a valuable aid by some.

Both these tests are now on trial and it is too early to speak positively as to their exact worth.

The diagnosis of gonorrhœa during pregnancy offers no difficulties not present at other times, and, in fact, the organisms are increased in numbers and symptoms more apparent.

Gonorrhœa in its immediate relation to pregnancy is best considered under three heads:—

- I. Influence upon conception.
- II. Influence upon course of pregnancy.
- III. Influence upon puerperium.

I. INFLUENCE UPON CONCEPTION.

As gonorrhœa often produces sterility in the male, in attempting to draw conclusions regarding its frequency as a cause of sterility in the female, it is always necessary to remember the possibility that, in a given case, we may be dealing with sterility of the opposite sex.

Where statistics are based upon dispensary practice, the percentage of infection is large. Gurd reported gonococci in 52 out of 112 pregnant women; Stephenson 18.43% among 1101. Taussig and Harrar give the figures as nearer 5-10%, which would include all

strata of society. Fitch states that 90 out of 100 women whose husbands contract gonorrhœa before marriage suffer from some ailment. The vulvo-vaginitis of early childhood may spread to the pelvic organs and peritoneum, and to this have been ascribed deformities and atrophic conditions of the uterus.

After puberty, if the disease can be kept from the cervix and vagina, it has little influence upon conception, other than possible dispareunia. Impregnation may take place when organisms are in the cervical canal, and the process has assumed a chronic form, but if the inflammation of the cervix is more severe, and the cervical secretion altered in consistency, probability of conception is slight. At the same time, I have seen several patients impregnated and infected by a single coitus. Involvement of the uterus and Fallopian tubes is a most serious complication, but, according to several writers, the outlook is not hopeless. Broadly speaking peri, ovarian and ovarian inflammation is not always so serious.

The frequency of gonorrhœal endometritis (25%) and possibility of implantation of the ovum on an infected endometrium are subjects concerning which there is a difference of opinion; but the weight of evidence would seem to show that uterine infection is fairly common, and that in about one-half of these, endometritis and mètritis are combined. Such conditions in the uterus are distinctly hostile to conception.

As to the spontaneous healing of the process, opinions differ as well. In chronic cases the organisms are said to remain quiescent in the deeper tissues.

Diffuse peritonitis and septicæmia occasionally follow infections; while pelvic peritonitis with its varying effects upon the pelvic organs is too well known to require comment. Kronig has demonstrated the organisms of Neisser in the pelvic tissues, and Wertheim in the lymphatics and blood vessels of the bladder, so it may be possible that in some cases of pregnancy with salpingitis, that the organisms reach the tubes through these channels instead of by continuity of mucous membrane. It seems safe to say that infection of the tubes generally causes sterility by an occlusion of their passage. Even if this is not complete, abnormal conditions of the tissues, disturbance of the ovarian functions, or malformations are produced, which present mechanical hindrances to which ectopic pregnancy has been ascribed.

II. INFLUENCE UPON COURSE OF PREGNANCY.

Pregnancy once established, various mechanical difficulties may attend its progress. Adherent displacements may prevent uterine development, ending in miscarriage. Gonorrhœal endometritis, accord-

ing to some, may lead to early separation of the placenta and abortion by the inflammatory changes in the decidua. According to others, it is a cause of adherent placenta, — two views quite widely separated as to end results. Again, infection has been given as a cause of premature labor, especially if contracted late in pregnancy, and it has been said that a toxine is produced which is detrimental to the child. Lobenstein and Harrar observed that the babies born of such mothers were under size and gained only 10.9% in weight during a period when the babies of healthy mothers gained 49.3%. Their observations have been corroborated by others.

Reasoning from the behavior of infectious processes in general, and the effect of this particular organism upon the genital tract at other times, there would seem to be no valid reason to doubt that it does produce tissue changes and toxins detrimental to both mother and foetus. Furthermore: arthritis, endocarditis, and other general processes, are more frequent during pregnancy, and the local symptoms apt to increase in severity. Unanimity of opinion, it will be seen, is lacking as to the manner in which it influences the course of pregnancy, but that it has a deleterious action is generally accepted.

III. INFLUENCE UPON THE PUERPERIUM.

The effect upon the puerperium depends, as in bacterial invasions at other times, upon the virulence of the organism, the susceptibility of the mother and the amount of traumatism in labor. Gonococci of apparently slight virulence may also become active and increase in number at this time.

Although as far back as 1893, Kronig proved their connection with puerperal sepsis, opinions still differ as to their exact role. They have been frequently found in the lochia, often associated with the streptococcus; and while undoubted cases of gonococcus sepsis do occur, it is claimed by some that their agency in sepsis has been overrated. Still others believe that the organism is not only the cause in many instances, although by reducing the vitality of the parts they render the individual more susceptible to invasion by the common pyogenic cocci.

Statistics from various sources give the gonococcus as present in from 5% to about 40% of all cases of puerperal sepsis, while, on the other hand, Foulerton and Bonney examined 54 cases with a negative result.

The average case of pure Neisser puerperal sepsis need cause little anxiety as regards life; but is often followed by a slow involution of the uterus, to say nothing of the opportunity for extension to other parts, which may occur weeks or months after the apparent

danger is past. In my own experience, in some instances with gonococci in the cervix, a chronic uterine discharge has persisted; in some, an acute tubal disturbance has arisen after menstruation was again established; and in still others—one with arthritis as well—there have been no apparent untoward symptoms. In all these the temperature has been either slightly elevated for a few days after labor or else remained normal. Like most of our cases, they disappeared from view after discharge, and in some whose subsequent history is known, it has been impossible to exclude a re-infection as the cause of a subsequent salpingitis.

It is generally conceded that the temperature in these infections is usually moderate; appears late, and, occasionally, may arise to such a degree as to stimulate infection with pyogenic cocci. It has been suggested that the farther the Neisser organisms have penetrated into the generative tract before labor, the sooner the fever appears.

Abscess of the Fallopian tubes may rupture during labor and discharge of pus from the fimbriated extremity may cause a fresh pelvic or diffuse peritonitis. Fortunately, diffuse gonorrhœal peritonitis is seldom seen, but is not unknown. Hunner and Harris reported 39 cases, including their own,—18 with bacteriological and 21 with clinical proof. Five out of nineteen operated, and eight of fifteen unoperated cases, died. A German writer has reported that two wives of the same husband died of puerperal infection from the gonococcus, and two others have each operated for gonorrhœal peritonitis after labor.

As has been previously stated, where the infection has been confined to the cervix and lower genital tract, and was of a mild type, pregnancy is common; but after the more extensive processes, either before or after pregnancy, we are often confronted with questions concerning the possibility of relieving sterility by some operative procedure.

In the management of these infections during pregnancy and the period of childbirth, an ounce of prevention is worth a pound of cure. The time is too short to go deeply into the subject, and only general principles can be mentioned. During pregnancy, the same measures can be used as in the non-pregnant, and every precaution taken to prevent the spread of the disease and to eradicate it in so far as possible before the advent of labor. Sexual intercourse should cease and all treatment conducted with greatest care and the strictest cleanliness maintained. As far as my own experience goes, it is difficult enough to eradicate the disease at any time, and almost impossible during pregnancy; nevertheless, it is often possible by faithful care to lessen the danger.

If the cervix is infected, any applications to it must be made with the greatest care, otherwise the pregnancy will be interrupted. During pregnancy, mild antiseptic douches may be given daily, coupled with other treatment, and immediately before labor, copious irrigation of the vagina should be used. It is also possible, after cleansing and drying the vagina and vulva, to paint with Tincture of Iodine diluted with an equal part of alcohol at the beginning of labor. Labor should be conducted without vaginal examination, if possible, and if operative measures are necessary, every precaution taken in regard to contamination. After labor, douches should be given once or twice daily with sterile water or some mild antiseptic solution, great care being taken not to allow the solution or douche nozzle to enter the uterus. By these means an infection of the lower tract may be kept from extending, as the gonococcus is not mobile.

If gonorrhœal sepsis supervenes, place the patient in Fowler's position, or raise the head of the bed to afford good drainage.

If after miscarriage or labor the uterus is empty, do not curet or douche its cavity. The lesions of the Neisser organism are usually local, and any intrauterine manipulation simply tends to spread the disease, and there is always the possibility of grafting upon a process, with a good prognosis as to life, a deadly pyogenic infection.

Hot vaginal irrigations for cleanliness are useful and they tend to contract the uterus as well. Collections of pus requiring operation should be drained vaginally. The other measures to be employed are such as suggest themselves for the general health of the patient.

There is one thing never to be forgotten, and that is the care of the eyes of the child. If in every doubtful case instillations of nitrate of silver were used immediately after birth, and treatment begun at once when pus appeared, our blind asylums would lose nearly one-half their inmates.

The question as to how much may be done to cure the sterility in women resulting from this infection is an interesting problem; but before undertaking the task in the wife, it should be ascertained that the husband is free from disease and that he is not sterile himself. It is astonishing how often the male is at fault, and under such circumstances, it is manifestly unfair to subject the female to operation, without some prospect of attaining the result sought.

By the cure of endocervicitis and endometritis, we appear at times to make pregnancy possible; but even the simple curettage should be undertaken only after the acute period is long passed. In intrauterine applications I have no faith, and they are dangerous. Even when the disease seems localized in the cervix, and the adnexa normal, changes in the tubes and ovaries are found on opening the abdomen, which

easily explains the failure to conceive, after the abnormal discharge had ceased.

Abdominal operations upon acutely inflamed tubes are, in my opinion, very dangerous and never indicated. Conservative operations at this time are naturally impossible, and should never be undertaken except where the process has subsided and has been quiescent for a considerable period.

There are cases reported where conception has occurred after salpingitis of a severe grade; but such are very rare and might be called curiosities. Even where the Neisser infection appears to have been mild, and where at operation few adhesions are found and the bulk of the tube is quite normal in appearance, the ostium is usually closed.

The state of the pelvic organs in many women makes conservative operations impossible, and it is only under the most favorable circumstances that surgery can offer the possibility of subsequent pregnancy after operations upon the diseased Fallopian tubes. This is true to a lesser extent with operations upon the ovaries.

By conservative surgery the opportunity for subsequent pregnancy is not wholly withdrawn. At the same time, with conservatism come the disadvantages of a possible extrauterine gestation or of a second operation for the removal of the tube, or portion of one, left behind. If we may judge from the history, some of these unfortunate results are due to a second infection.

In a series of ectopic pregnancies from the Boston City Hospital records, from one-third to one-half had a suspicious history of some previous pelvic inflammation. Two of these patients had each two extrauterine conceptions after a probable gonorrhœal infection; but recovered from both operations.

Statistics in regard to pregnancy after conservative operations upon the adnexa are rather unsatisfactory, owing to lack of certain data as to marriage, age, conditions present at operation, etc.

Figures given for married women under 40 years by two writers were 25%; while two others, after examination of a large series, concluded that 10% and 5% respectively became pregnant. In a large number of women operated during the child-bearing period, 17 of 26 pregnancies resulted after the removal of one ovary and a resection of the other, and I have seen a number of pregnancies after the removal of one tube and ovary. Conception has occurred after both tubes have been removed, showing a certain tendency for the stump of the tube to become patulous. A small proportion of all cases conservatively treated will require a secondary operation, the figures varying from 5% to 15% in different series.

While the results of abdominal operations to preserve the child-bearing function are not flattering, there is a possibility of success coupled with some danger of ectopic gestation and secondary operation.

It is the selection of suitable cases, and a wise conservatism at the time of operation, which minimizes the likelihood of secondary operations and makes success possible in a limited number of women.

After having considered a few of the interesting and important points in Neisser infections in the female, there is still one point worthy of an evening to itself, — that is, prophylaxis.

Prophylaxis aims: First, to protect the uninfected, and second, to care for and cure the infected that the latter may cease to be a menace to themselves and to society.

No one realizes better than the physician the futility of attempting to deal with certain aspects of the question under present conditions. Few hospitals receive venereal disease, and the very class of patients who would be under supervision in an institution give up treatment before a cure is effected. We may lessen the spread of infection among men who are under control, as is evidenced by army and navy statistics, but among women, such prophylactic measures are impossible. There is also no one method suited to every community and to all classes.

The treatment of the problem of sex is agitating the minds of many men and women to-day, but public opinion has not yet crystallized as to how or when such knowledge should be imparted. The regulation of illicit sexual intercourse has never yet been successful, and so long as it remains unsuccessful, venereal disease will abound. At present, adults are poorly informed and youth obtains its ideas of sexual matters through undesirable channels. Would more harm be done by explaining the sexual relations and the dangers of disease, at a proper age?

A surgeon in middle life once said to me in regard to asepsis: "The older men can never learn it; I can learn it partially; but to you younger men, who have had it held before you from the start, it becomes a second nature." This expresses my belief in regard to one phase of venereal prophylaxis.

It is not by lectures, not by the dissemination of literature among those whose habits are formed, or who have already sowed their "wild oats," that great good can be effected. Lectures on this subject have been given in both army and navy with but slight result. The average of men there is the same as elsewhere, and I see no reason for any difference in the other sex.

The most far-reaching results will be attained by the training of youth, that, in so far as possible, a proper knowledge of the sex

problem may begin with early years. Some, as a result of early training, will keep the narrow path because of a sense of moral obligation, early implanted; still more, perhaps, because of the fear of dangers on either hand, and those who recognize neither the dangers nor the moral obligation, must be dealt with in a manner as yet unsolved.

REFERENCES.

1. FOULERTON AND BONNEY, *Lancet*, 1905, Vol. I, p. 915.
2. HEPBURN, *Yale Med. Jour.*, 1908, p. 167.
3. HUNNER AND HARRIS, *Johns Hopkins Bull.*, 1902.
4. IRONS, *Jour. Amer. Med. Assn.*, March 30, 1912, p. 931.
5. LOBENSTEIN AND HARRAL, *Bull. Lying-in Hospital, N. Y.*, Dec., 1906.
6. LONDON, *Amer. Medicine*, 1912, N. S., Vol. VII, p. 219.
7. MORROW AND BRIDGMAN, *Jour. Amer. Med. Assn.*, May 25, 1904, p. 1564.
8. MORROW, P. A. *Maryland Med. Jour.*, 1908, Vol. 51, p. 259.
9. O'NEIL, *Boston Med. & Surg. Jour.*, Oct. 3, 1912, p. 464.
10. ROBB, *Trans. Amer. Gyn. Soc.*, 1906, p. 334.
11. SCHWARTZ & MCNEIL, *Amer. Jour. Med. Sciences*, 1912, p. 815.
12. SMITH, G. G. *Amer. Jour. Diseases of Children*, April, 1913.
13. YOUNG, E. B. *International Clinics*, 1908, Vol. II, 18th Series.

A CASE OF INTERMITTENT CLAUDICATION WITH X-RAY FINDINGS.

BY WILLIAM PEARCE COUES, M. D., BOSTON.

Instructor in Surgery, Tufts College Medical School,
Assistant Surgeon to the Boston Dispensary.

So many cases of painful feet, are called "rheumatism," or flat-foot, or metatarsalgia, and treated for months or years by the general practitioner as well as the orthopedic surgeon, that the greatest care is necessary in differentiating the occasional case which does not respond to treatment after due time, either on account of other than static or rheumatic trouble, or a combination of the above-named disability and disease with other troubles.

A slight amount of "hard" edema, seen in some cases of cardiac

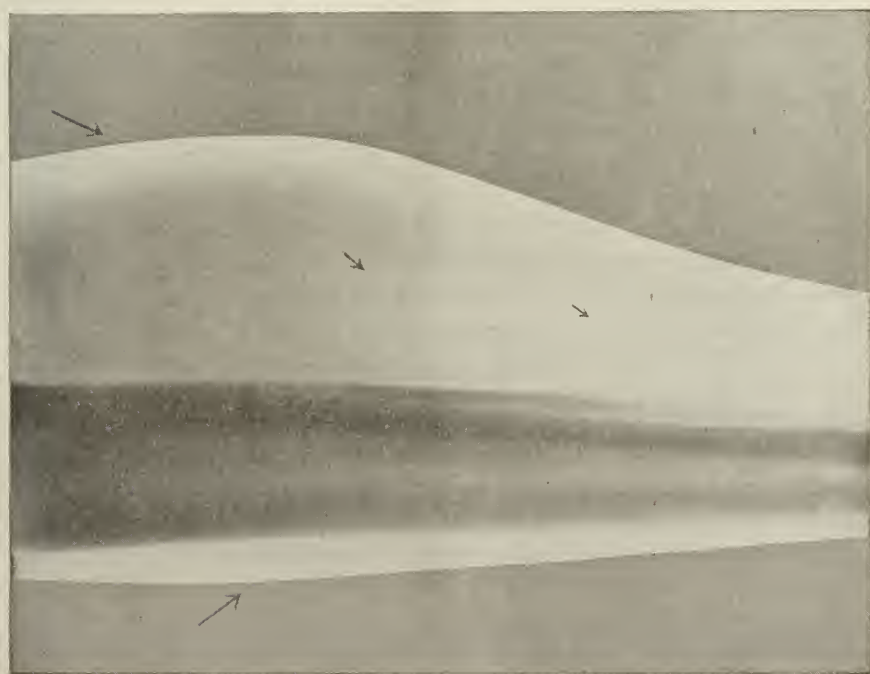
disease, where compensation is just beginning to fail, and which is difficult of recognition, has undoubtedly been unrecognized many times and its victims treated by the orthopedic surgeon for flat-foot or rheumatic trouble. No one will question that the ordinary lesser grades of edema are easy of recognition, but a slight brawny edema may at times deceive the elect. Such an edema does not really pit on pressure, but it interferes with circulation, presses on the periosteum, and makes tender feet and heels.

The ordinary dictum that arteriosclerosis of the lower vessels (legs and feet) usually means that the heart and aorta are in fair condition is doubtless true in many cases, but not always so.

Arteriosclerosis effecting the leg vessels, popliteal, anterior and posterior tibial, and peroneal arteries, is recognized as not very uncommon without symptoms of a definite character. When symptoms do occur, they are of a character to confuse and often give rise to incorrect diagnosis, particularly when (1) an X-Ray is not taken, and (2) an X-Ray is taken showing other conditions that might cause the symptoms, flat-foot, spurs, etc. Undoubtedly many cases occur where the sclerosis is not advanced to a degree to be seen in an X-Ray picture and not causing very definite symptoms. Many cases of "intermittent claudication" are sent to the out-patient clinics for diseases of the nervous system under the diagnosis of nerve lesion.

Report of Case. J. H., 61 years of age, was seen after a lapse of some years on November 28, 1913. A diagnosis of probable aortitis and more or less general arteriosclerosis had been made previously, and he had been given the usual directions by me for his mode of life for one suspected of this trouble, without giving him cause for too much anxiety. There was no question at this time of involvement of the lower vessels in this process. There was nothing of note in the family history, except that the patient states that his mother died of chronic diarrhea, which makes us think of a possible chronic nephritis as a cause (compensatory diarrhea). The patient denies venereal trouble, is a moderate user of tobacco, and a moderate user of alcohol in the form of whisky. His occupation is a very arduous one, necessitating much travel and standing on the feet for long periods of time. He had typhoid fever at 18 years of age; otherwise fair health. In 1906, he was treated for bursitis of left elbow after slight traumatism. This was very slow in getting well. In 1909, he had synovitis of ankle, which was also very slow in getting well, despite most general orthopedic measures used for this trouble. The only real relief for the condition was by strapping. At this time, some numbness of the arms and legs was complained of at times. The blood pressure was then 145, the urine acid and concentrated

without albumen or sugar; and this remained the same at many examinations, despite the ingestion of considerable amount of water and dietary measures. In May, 1911, the patient complained of numbness of the little toe and feet and legs. He did not at this time get out of breath more easily than formerly. Weight was 164 pounds; height 5 feet 4½ inches. The blood pressure at this time was 160 against 145 at the last visit. The heart was not enlarged to percussion, and there were no murmurs. Iodine and nitroglycerine were prescribed, but the treatment was not carried out fully. The patient was fairly well until early in the autumn of the year 1913, when there was much more trouble with the feet, particularly with the left. At this time, there was so much pain in the left ankle and foot that sleep was impossible. The pain was at times like a toothache (vessel spasm, ischemia?) Flat-foot plates had been made for the patient by another physician, but gave absolutely no relief to the symptoms. His work was accomplished with the greatest difficulty. At this time he felt he would have to give up his business on account of the disability and pain. The pain and aching in the left foot are better at times, and he is encouraged for a few days only to be cast down again. The pain is distinctly intermittent in character. Examination at this time showed the general condition of heart and blood pressure about the same, but patient had lost 20 pounds or more in weight; knee jerks were lively on both sides; pupils were equal and reacted to light and accommodation; the heart sounds did not seem nearly as strong as on previous examination. The legs and feet were examined very carefully, and the importance of an X-Ray explained to the patient, who did not wish it at this time. There was extreme pain on pressure over the plantar surface of the left os calcis; both tibæ were very tender to pressure. There was absolutely no flat-foot present; there was no edema. At this time, the left ankle was strapped, and the patient was put on large doses of iodide of potassium and nitroglycerine with salts in the morning, which latter the patient had had before. From this time, there was marked, but not rapid improvement. The foot was less painful and the aching was less. A Wassermann reaction done at this time was negative, although the X-Ray showed cortical thickening of both tibæ. There was also a very slight spur on the left os calcis. Besides these findings in the bone, the X-Ray showed the anterior and posterior tibial and peroneal vessels very plainly in a most clear and unusual manner. The posterior could be followed down in its course to the lower third of the os calcis, and was very tortuous. In two months' treatment after this time, it is fair to state that the patient has made great improvement,



due perhaps to the strapping and iodide and general care. Business is no longer a nightmare, and his life has been more comfortable.

It would seem that the vessel sclerosis, so clearly and beautifully shown by the X-Ray pictures (see p. 1815) taken by Dr. F. B. Granger, was probably the cause of most of the patient's symptoms, and that perhaps the iodide and other measures had some effect in checking further sclerosis and spasm.

It is not too much to say that all obscure cases of foot trouble, with similar symptoms, should have an X-Ray for sclerosed tibial vessels taken, and such cases should be treated for their arteriosclerosis as well as for any static trouble that may be present.

*Read before the Aroostook County Medical Society, January 18, 1914.

***BRONCHO-PNEUMONIA IN CHILDREN.**

BY A. H. DAMON, M. D., LIMESTONE, ME.

This is the prevailing type of pneumonia in infants and young children, in fact, the majority of cases of primary pneumonia, occurring in the first two years of childhood are of this variety, and, although sometimes acute in its origin, its invasion is never so abrupt and well marked as the lobar type. It is more directly connected with breathing cold air, or air laden with dust and other mechanical impurities, than is lobar pneumonia, and seldom occurs in epidemic form, although we find a tendency to increased prevalence among the poor, especially if there is a herding together, so to speak. This epidemiological aspect may be due to increased susceptibility to infection, owing to the fact that their children are ill-fed, syphilitic, and marantic.

Case histories show that the disease is most prevalent during the winter months, when there are epidemics of influenza, that its mortality is high, owing to the age of the patient, occurring as a primary disease most frequent during the first two years of life, and among the male sex in a proportion of five to four. In the secondary cases the sexes are about equally effected. As a complication in other diseases we find it occurring throughout childhood.

Delafield tells us that the essential lesion in broncho-pneumonia is an inflammation of the walls of the bronchi and of the air spaces surrounding the inflamed bronchi. The walls of the bronchi are thick-

ened and filtrated with small round cells, those of the areolae of the lungs thickened and their cavities filled with fibrin, pus, and new epithelial cells. The smaller bronchi are dilated and contain pus. The mucous membrane of the bronchi is the seat of the catarrhal inflammation. Persistent broncho-pneumonia in children leads to induration of the lung. There is an inflammation of the pleura in varying degrees.

In 82% of autopsies performed by Holt, disease was found to extend to both lungs; the lower lobes posteriorly being mostly effected, next to these the posterior part of both upper and lower lobes. The left lower lobe was more extensively diseased than the right in over $\frac{2}{3}$ of the cases. Only a single lobe was involved in but 9%. It is not common for the disease to be situated in the anterior portion of the lung only, but, when this does occur, the apex of the right lung is the most frequent seat.

There are several distinct types of bronchial pneumonia. The infant born in normal condition after some slight exposure, develops snuffles and cough; these gradually become more marked; infant does not sleep; shows a slight cyanosis; after a time, this becomes more marked and constant; little or no temperature, even when the infant is mortally ill; stools are greenish, containing undigested curds; cyanosis and dyspnea become more marked; respiration increases to more than 80 per minute; pulse rapid; heart weak; end may supervene, with tympanites, convulsions, and edema of the lungs.

Another form of broncho-pneumonia in infants begins as a simple bronchitis and may be treated as such for days until, accidentally perhaps, fine crepitations are found posteriorly in both lungs. This type runs its course with temperature rarely above 101 degrees, usually occurring in weakly infants and children or following a mild influenza. The attacks of coughing are especially troublesome and frequently followed by vomiting the contents of the stomach. The evacuations of the bowels are loose, showing greenish particles and undigested food. Dyspnea is constant and characteristic and if the patient is out of his head, grows more marked in the afternoon; cough may persist for weeks after acute symptoms have subsided and is especially troublesome at night.

Another type of the primary kind begins with symptoms not unlike those of lobar pneumonia, symptoms of bronchitis merging rapidly into those of pneumonia. When the onset is rapid there is high temperature, rapid respiration, cough prostration, sometimes vomiting and cyanosis. The temperature is usually of a remittent type and continues from one to three weeks, gradually subsiding, rarely terminating by crisis. The respirations are rapid, usually from 60 to

80 per minute, and respiratory failure seems to be a more frequent cause of death than cardiac failure. Pulse rate is always rapid, sometimes irregular. This rapidity is rather of less importance than the character, at the first of the disease it is usually strong, but soon becomes soft and compressible. Cough is very persistent and more constant than in lobar pneumonia, sometimes incessant, disturbing rest and sleep, and may cause vomiting if spasm occurs after eating. Expectoration, if any, is scanty, sometimes mucus is coughed up into the pharynx to be swallowed again. Cyanosis is present in nearly all cases at some time during the disease and is usually due to sudden congestion of new area of lung; even when slight, it is always a danger signal of respiratory failure, and, when present only in a slight degree, indicates that the patient must be closely watched.

When called to see a child under four years of age, with continuous high fever, rapid respiration and cough, we may suspect pneumonia, but when, to these symptoms, dyspnea, cyanosis and prostration are added, there can be no doubt as to the diagnosis.

It is true, in broncho-pneumonia, as in other diseases, that we do not always find all the symptoms as given by the authors of different text books. Temperature may not run high, even in fatal cases; cough may be entirely absent; respiration is nearly always rapid; in very young infants diagnosis very often rests on cyanosis, prostration and rapid respiration, other inflammatory symptoms being absent. At the beginning of the disease it is sometimes very difficult to diagnose between broncho-pneumonia and bronchitis in a severe form. Bronchitis often begins with severe pulmonary symptoms, temperature from 103 to 104 degrees. But this temperature usually falls in 24 hours, prostration is not so marked and all other symptoms excepting cough are less severe, the only physical signs are the coarse rales throughout the lungs.

I have found from experience that it is not safe to make a prognosis in this disease, even when the patient appears to be doing well in every way; new involvement of lung area; weakness of the heart; cerebral symptoms; convulsions; any one or all of these may arise in a few hours and change what seemed like a favorable prognosis into a very unfavorable one.

Since this is a self-limited, acute, and infectious disease, we should endeavor in our treatment, to support the heart, counteract the effects of high temperature, keep patient properly nourished, and be prepared to meet other symptoms as they arise. The heart may be supported by means of digitalis, alcohol, strychnine, camphor, and caffeine. Of these I have found strychnine the most useful, unless there is excitability of the nervous system.

Digitalis may be used in cases in which there is cyanosis in slight degree or a high pulse rate, giving I gtt. for every six months of age, every three hours, and discontinuing after two days. One author recommends the use of ammoniam carbonate when digitalis can not be used. At the New York Polyclinic, they recommend the use of camphoric acid from gr. II to gr. VIII according to age, two or three times a day in sugar or orange juice.

To counteract temperature, cold applications seem to be the best. This may be used as a compress renewed every hour, keeping temperature of water about 70 degrees, or an ordinary bath towel with holes cut for arms, so that it may fit like a jacket, may be used; this, saturated with water of desired temperature, is an easy and quite satisfactory way of applying cold. Cold baths are not advised by authors on this subject.

For control of nervous symptoms, and even when there are none, hot mustard baths have been found beneficial, a heaping tablespoonful of powdered mustard in a gallon of water as hot as it can be borne, child placed in this and rubbed briskly.

Feeding of infants who are taking artificial food should be carefully watched as broncho-pneumonia is a disease in which diarrhea is apt to occur. If diarrhea begins a cathartic of castor oil may be given. This followed by high rectal enemas of normal salt solution once or twice a day, with food of egg albumin and cereal gruels will as a rule overcome this condition.

To ward off tympanites and stimulate the heart, we may use the light rectal enemas of normal salt solution.

For the cough which is sometimes very harassing, compound tincture of opium for infants and codeine for older children have been advised. At the Polyclinic they recommend the use of the following:

R	Liq. Ammonii anisatis,	f. dr. iv
	Sodii bicarb.,	dr. 1 ss.
	Aquae distil.,	f. oz. iv

While little can be done for the disease, much can be done for the patient; good nursing, plenty of fresh air, bowels kept freely open, careful attention to nutrition, especially during later stages, when there is danger from exhaustion; avoiding all unnecessary medication to prevent disturbances of the stomach. All these seem necessary in the treatment of this disease.

***CASE REPORT OF PERNICIOUS ANEMIA.**

By JAMES MELVIN STURTEVANT, PORTLAND, ME.

A meat cutter, aged 45, was admitted to St. Barnabas Hospital, November 28, 1913.

Family history excellent.

He gave a personal history of having had a few of the so-called children's diseases, but has never had diphtheria, scarlet fever, typhoid fever, or rheumatic fever.

About four years ago he said that he "got run down and had a bilious attack." He developed a lemon yellow color all over his body, was very weak, and fainted while at work. He kept about his work all the time, except for three or four days, and gradually improved. Since that time he has had several of these so-called "bilious attacks" which, he said, have been relieved by calomel and tonics.

He has experienced no pain at any time, not even headaches. He has never shown any constipation or diarrhea during or previous to these "bilious attacks."

The onset of the symptoms of this present illness was so gradual that it is difficult to learn just when the disease began.

About the first of June, 1913, he began to experience peculiar faint spells referable to the stomach. These sensations occurred quite regularly about ten or eleven o'clock each forenoon.

He became tired very easily and noticed that brisk walking caused him to have shortness of breath and palpitation of the heart. Each night he felt so exhausted that he experienced great difficulty in getting home from his work.

His feet and legs swelled badly and continued to do so until he was admitted to the hospital where he was kept in bed.

Upon physical examination he showed a very pronounced lemon color of the skin with no discoloration of the sclera. The preservation of subcutaneous fat was a most striking feature of the case; especially of one having such an insidious onset and which had reached such an extreme degree of weakness.

The circulatory system showed a regular full pulse of about 86. The arteries were apparently normal. The blood pressure was 112. Percussion revealed no abnormal conditions of the heart. Upon auscultation a systolic murmur was heard at the apex only.

There was a markedly visible pulsating area over the junction of the sternum and left clavicle and also over the region of the carotid

*This case was admitted to Dr. Cousin's service at St. Barnabas Hospital with the diagnosis of a severe anemia presumably due to a malignant disease in the abdomen.

artery of the right side of the neck. This was also noted in a less degree over the carotid artery of the left side.

All the examinations of the lungs were negative.

There was no appreciable enlargements of the liver.

Spleen not palpable.

The right kidney *was* palpable.

The temperature at the time of the patient's arrival at the hospital was 97 degrees which, during the progress of the disease, was quite transitory in character, ranging from 97 degrees to 100 degrees.

At first the stools showed very light clay colored lumps which soon assumed a normal character.

The urine was acid, having a specific gravity of 1,016 and containing a trace of albumen. No sugar, bile or indican were present. Microscopic examination of the urinary sediment revealed many hyaline casts, few granular casts, few epithelial casts, many cylindroids, and some mucus. There were a few flat and a few round epithelial cells.

Examination of the blood showed:—

Hemoglobin 40%.

Erythrocytes, 792,000.

Leukocytes, 3,250.

The different count of the leukocytes revealed:—

52% of polymorphocellular.

23% of small lymphocytes.

2% of large lymphocytes and

23% of myelocytes.

A series of fourteen complete examinations between November 20th and January 3d showed the following average:—

Hemoglobin, 41%.

Erythrocytes, 966,400.

Leukocytes, 3,384.

Polymorphocellular leukocytes, 45%.

Small lymphocytes, 25.5%.

Large lymphocytes, 6%.

Myelocytes, 23.5%.

The leukocyte count varied from 6,000 to as low as 2,000. The erythrocytes ranged from 1,356,000 to 640,000 and showed a marked poikilocytosis.

When a drop of blood emerged from a puncture it was always remarkably well colored, due to the high color index which was present at all times.

When a drop was soaked into a piece of bibulous paper the red spot produced by the blood became surrounded by a pale ring, which,

while wet, appeared like colorless moisture, but as the blood stain became dry the ring remained, and showed a slight grayish tint of its own.

A brief summary of all the findings make the diagnosis comparatively simple.

The lemon tint of the skin might suggest jaundice but the absence of discoloration of the sclera is against that. The pallor, apparent anemia, insidious onset and some degree of gastro-intestinal disturbance causes us to consider malignant disease. Against this we find absence of pain, no wasting of subcutaneous fat, and a high color index of the blood. The corpuscular count is much lower than is generally seen in any disease except pernicious anemia. Cabot says, "There is no disease which so often reduces the red blood corpuscles below two millions per cubic millimeter as does pernicious anemia."

The swollen feet and ankles together with casts and albumen in the urine might suggest nephritis. The shortness of breath and palpitation of the heart might indicate heart disease, but these findings are also consistent with pernicious anemia; especially so in the absence of signs of local disease.

The marked pulsations of the neck and the pale ring around the red spot as shown by the Talquist Hemoglobin scale are rarely seen in any other disease than in pernicious anemia.

The treatment of this disease consisted of rest in bed, regulation of the bowels, abundance of nutritious foods, and hypodermic medication of iron, arsenic and strychnine twice daily, together with chlorhydrosulphate of quinine once daily.

When the patient was allowed to go home on January 12, 1914, the hemoglobin was up to 65%, with no marked change in the number of blood corpuscles.

Defence of Vivisection and Animal Experiments.

At a recent meeting of the Nottingham county branch of the Research Defence Society, the Bishop of North Queensland defended animal experimentation, vigorously, and claimed that the triumphs in medical research so obtained had so far reaching an effect on the English people that it would be difficult for them to realize what England would be, without them. He expatiated on goiter, tropical diseases, dengue, beri-beri, filariasis, and so on and showed the advances in health that had been obtained by such investigations. The Bishop demanded, in the name of the people, the very best opportunities of every possible sort for studying and possibly discovering what might ultimately be of untold benefit to humanity.

Review of Current Literature.

Relation of General Arteriosclerosis to Certain Ocular Conditions.

By Elsworth Smith, M. D., Clinical Professor of Medicine, Washington University Medical School, St. Louis.

This paper was brought into existence because of cases referred to the writer by ophthalmologists, who, in their examination of the eyes, had discovered evidences of general vascular disturbances requiring the attention of an internist.

A brief review of the etiologic factors of the arteriosclerosis are given under the following heads:

- 1st. Wear and tear of life—Americans in particular.
- 2nd. Acute infections, such as syphilis; eruptive fevers; tuberculosis, etc.
- 3rd. Intoxication—exogenous and endogenous.
- 4th. Conditions keeping up high blood tension—principally over-eating, especially proteids.

As to whether high tension or the sclerosis is primary, the writer believes that the former is more common than the latter.

The pathology consists primarily of a degeneration in the media with a compensatory thickening of the intima, which process accounts for all the different varieties of sclerosis.

The arteriosclerosis, although general, is usually not uniformly distributed throughout the vascular system, thereby accounting for the complex picture of the disease.

In considering the prognosis past damages cannot be undone, and for this reason every possible effort should be made to detect the disturbance early.

For this reason an examination of the eyes is an invaluable aid as in a large proportion of cases evidence of this disease is here manifested long before any tangible signs are discoverable by our present methods of physical examination.

Foremost, of course, among the ocular diseases of general arteriosclerosis ranks retinitis or the so-called albuminuric retinitis, although not always seen in typical form. There are also other diseases of the eye which are closely allied with general arteriosclerosis such as glaucoma, vitreous opacities, choroiditis, etc.

In addition to the eye treatment, careful attention should be directed to diet, rest, regulated exercise and a careful and thorough elimination. Also special mention is made of the value of the iodides and nitrates.

There are appended twelve cases studied in a tabulated form.

E. E. H., JR.

(Archives of Ophthalmology)

The Experimental Production of Sclero-Keratitis and Chronic Gutra-ocular Tuberculosis.

By F. H. Verhoeff, M. D.

Verhoeff has, in his experiments, proved the fact that tubercles in the eye may be produced by the action of the toxins as well as from the bacillus itself.

When dead bacilli are injected into the anterior chamber, tubercles were found in the neighborhood of the Sclero-corneal junction and, when injected into the vitreous, the retina and choroid are affected, also the anterior structures.

He believes that most of the lesions are disseminated by way of the filtration angle rather than by the blood current.

A. W. H.

(American Medical Journal, Mar. 7, 1914.)

Ultra-violet Light as a Germicidal Agent.

By F. H. Verhoeff, M. D.

In his article, he disputes Hertel that it has any germicidal action that may be suitable for the general practitioner or specialist, to be effective as Hertel claims for corneal ulcers. The length of time of exposure that would be necessary to have any therapeutic action would cause damage to the healthy cornea and the capsule of the lens.

A. W. H.

(Archives of Ophthalmology)

New Aspect of Gout and Its Relation to Gouty Diseases of the Eye.

In this excellent paper, the writer takes up fully the etiology of gout. He considers the purin bases are the most important of the nucleic acid molecules.

Keratitis, scleritis, episcleritis, iritis and glaucoma are the eye manifestations.

He concludes by giving proper diet and treatment for this class of cases.

A. W. H.

(American Journal of Obstetrics. February, 1914.)

The Roentgen Rays, Radium, and Mesothorium in the Treatment of Uterine Fibroids and Malignant Tumors.

Geheimrath Prof. Dr. Kronig, Freiburg, Germany.

Regarding the first class of cases, the fibroids, the writer states that in every case there has been accomplished a cure by means of either the X-Ray alone, or in combination with mesothorium or radium, although by far the greatest number of cases were treated by the X-Ray alone. For three years, this has been the only method of treatment used in fibroids except in those which could be enucleated. Amenorrhea comes with cessation of the other symptoms and shrinkage of the tumor, but it does also with a hysterectomy, and the intensity of the symptoms of a premature menopause are not so severe.

Regarding cystic tumors of the ovary, none have been helped if they were larger in size than an orange.

In respect to malignant growths of the uterus, he tabulates his results in three classes, and reports that no good was done any cases of metastatic carcinoma, that carcinomas with involvement of the glands respond in a small percentage, and that in localized tumors, or in cases in which the treatment is used as a preventative of recurrence, a fine percentage of cures is shown. The writer believes that in these operable cases, the use of X-Ray and the radio-active substances, by eliminating the mortality of a surgical operation, has a large field of usefulness.

Discussion as to the proper methods of filtration of the rays used, so as to give most effectiveness without any untoward symptoms, is clear and complete.

H. J. E.

Pubiotomy vs. Caesarean Section in Neglected Cases.

A. J. Rongy, M. D., New York City.

The writer makes a careful and thorough study of nine cases in which he had done a pubiotomy, and from them draws the following conclusions:

1. That in neglected and supposedly infected cases, Cæsarean section is not the operation of choice.

2. In such cases, pubiotomy is a necessity as it saves the child and adds but little to the danger of the mother.

3. Pubiotomy is never an operation of election.

4. Cæsarean section and pubiotomy are never competing operations. Where one is indicated, the other is most decidedly not indicated.

H. J. E.

Uterine Hemorrhage Associated with Hypertrophy and Sclerosis of the Uterine Vessels.

By Lewis W. Smith, M. D., Pittsburg.

This paper is written in answer to one appearing previously in this magazine, which advocated hysterectomy as a treatment for a condition named as atheroma of the uterine blood vessels. In the opinion of this writer, the condition of the blood vessels is not an indication for any specific operation, nor is it in itself the cause of the bleeding. This is substantiated by the fact that the conditions of uterine hæmorrhage and sclerosis of the vessels are not always coincident. What the hæmorrhage is due to is a disputable question, and the discussion of this point the writer hopes to bring out by this paper.

H. J. E.

(British Medical Journal, Dec. 13, 1913.)

Significance of Spontaneous Hemorrhages.

There is a clever paper in the British Medical Journal for December 13, 1913, on the significance of spontaneous hemorrhages as an early sign of disease. This does not mean loss of blood from easily recognizable causes, such as injury, or definite diseases like tuberculosis. The idea of the paper is to discuss unexpected hemorrhages in persons in apparently perfect health or in association with symptoms which do not account for its onset. Epistaxis, for instance, is not alarming as a symptom unless long continued, but occurring with rise in temperature, it may be an early symptom of enteric, especially if accompanied with frontal headache. A case is here inserted in which a woman of 47 had a temperature of 103 degrees with recurring epistaxis. Enteric was suspected but the spleen was not enlarged, there was no abdominal distension, no rose colored spots and Widal was negative. The final diagnosis was influenza, with epistaxis. Epistaxis in nephritis, and arterio-sclerosis is well known. Sudden epistaxis in middle age suggests granular kidney. Urinalysis, pressure tests, and the ophthalmoscope will probably clear the diagnosis.

Æmoptysis suggests tuberculosis, but it may mean aneurism on a neoplasm. A curious hæmoptysis proved to be hemorrhage from the bronchial mucosa, like epistaxis or gastrotaxis. Hæmoptysis may arise from a dilated vein in the glosso-epiglottic fold. Hemorrhages from the gums may be erroneously diagnosticated as tuberculous. Blood in the urine may come from any part of the tract, but if from the bladder only, it drops out only at the end of micturition. Tuberculosis of the kidney, neoplasm, or calculi may also produce hæmaturia.

J. A. S.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Civilization and Refraction.

From the report of the hospital of San Jose in Lisbon, Portugal (Uma Estatistica Ophthalmologia) for nineteen years of its existence we gather curious proof of the production of errors of refraction in educated countries. For whereas in the hospital for the eyes in the United States, in England, and on the European continent, generally, the percentage of patients asking for lenses for refractive errors is something enormous, sometimes as high as 70% of all the patients, the statistics of this eye hospital in Lisbon show us that out of 60,000 patients in all these years, only about 1,300 needed lenses. In point of fact and very truth, the people of Portugal read but little, education has not reached the masses, and the masses have no need for lenses wherewithal to read poor type printed into poorer porous newspapers and magazines. Here then we find about 2% only, asking for lenses. Injuries in this report run high, sympathetic ophthalmia, however is very rare, trachoma and ophthalmia occurring above the average in what we call civilized lands.

Ear Ache.

It occasionally happens that the medical practitioner is asked to advise for an ear ache, yet on examining carefully the interior of the ear, including of course the giving of a careful look at the aspects of the ear drum, he finds absolutely nothing for an apparent cause. The hearing is normal, the appearances of the drum head are absolutely normal, and the remainder is guess work. In such circumstances we have to consider deeper seated troubles as osteo sclerosis of the mastoid, reflex irritation from the teeth, or tonsils, and syphilis or other constitutional diseases. We have lately seen a case in which the pain

originated in an enlargement of the bony lining of the meatus, from rheumatism, and the pain soon diminished after utilizing the salicylates. In a recent number of the British Medical Journal, of the date of February 21, 1914, we observe two instances of this curious symptom, namely: Ear ache without visible symptoms in the ear itself. In one of these cases the cause was found to be syphilis, with an exudate, which disappeared in due season after mercurials and the iodides in full doses. In another case, the mastoid process demanded sufficient drilling in order to produce the effect desired upon the local pain. This last case reminds us of another of similar nature seen some years ago in which after long continued ear ache complete relief followed the drilling of a space in the mastoid sufficient to permit the antrum to be ultimately reached after striking a very hard layer of bone of extreme hardness. Fortunately, cases of ear ache without appreciable symptoms are rare, but whenever seen they tax the ingenuity of the most skillful specialists to discover and to remove the cause and then to relieve the discomfort and anxiety of the patient.

***A New Ophthalmological Journal in Germany.
Das Zentral Blatt fuer die Gesamte Ophthalmologie.***

(The central journal for universal ophthalmology.)

This is indeed a world of literature of today, and the practitioner of medicine or of a specialty who tries to keep up to date with the newest devices, ideas, suggestions, inventions and literary hashings up of old ideas and suggestions from times historical, finds himself overwhelmed with material. Out of this abundance the only way is to drop most of the journals, for somebody else to read, and to follow one branch of medicine. The only exception is the busy editor of a medical journal, who finds himself compelled to say a few words on current topics, such as the appearance of a new Journal. Here then lies before us the first number of this new magazine on the eye, issued in Germany, and promising for a year to issue two large volumes costing somewhere about \$10, according to the amount of material finally published. It is to contain brief notices of EVERYTHING published EVERYWHERE in the world on ophthalmology and its allied topics. The first number contains 48 pp. and critiques of 120 different papers. From this amount one can judge the labor involved in making critiques of so many papers and the labor involved in the reading thereof. To the younger men in the study of ophthalmology we can heartily commend the ownership of such a work, for from its pages year by year he can keep informed of all that is occurring. It is to be hoped that the volume will close with a copious index, for without it the reader

will find himself lost, shipwrecked amidst shoals of literary papers floating unlabelled, side by side, in a sea of a thousand pages.

Common Drinking Cups and Towels.

The following rules and regulations were approved March 30, by the Governor and Council:

Section 1. The use of a common drinking cup or a common towel on any railroad train or other common carrier or in the stations, waiting rooms or lavatories connected therewith, or belonging thereto, or in any public, parochial, or private school, or in any State educational institution, or in any hotel or restaurant, or in any theatre or other public place of amusement, is prohibited.

Section 2. No person, firm, corporation, board, or trustee in control of or in charge of any common carrier or building, room, institution, or place mentioned in section one, shall place, furnish, or keep in place, any drinking cup or towel for public or common use; and no such person, firm, corporation, board or trustee, shall permit the use of a common drinking cup or a common towel on or in any common carrier, or building, room, institution, or place mentioned in Section one.

Section 3. The term common drinking cup as used herein is defined to be any vessel or utensil used for conveying water to the mouth, and available for common use by the public or the passengers, or guests, or inmates of the places mentioned in Section one. The term common towel as used herein shall be construed to mean roller towel or a towel intended or available for common use by more than one person without being laundered after such use.

Lady Lister's Next of Kin.

Medical men may be interested in a decision regarding the estate of the late Lord Lister, who made ante-nuptial settlements by which Lady Lister's next of kin were to inherit certain monies. The question has arisen since the death of Lord Lister whether "next of kin" meant under the Scottish law or under the English law. Lord Lister was first an Englishman, then a domiciled Scotchman and finally a domiciled Englishman. Lady Lister was a domiciled Scotchwoman and later a domiciled Englishwoman. But the marriage was under the Scotch form, and it was held that Lady Lister's objects of bounty came in under the Scotch law. No one could assume that in changing her domicile, she intended to change the objects of her bequest, unless she expressed a clear intention to that effect.

Medico-Historical Notes.

BY JAMES A. SPALDING, PORTLAND, ME.

The Blindness of St. Longinus.

The 15th of March in every year brings around in the Roman Catholic Church, the feast of the conversion to Christianity of Longinus, concerning whom it is necessary I think, that I shall have to remind you that he was the Roman soldier who pierced the side of Christ crucified, so that from the orifice ran blood and water. The ancient myth attaching to Longinus, so called from the Greek Longkee, a lance, or longkeenos a lance bearer, is that as the blood and water flowed from the side of Christ, part of it spattered upon this soldier, and he SAW the truth of Christianity, and instantaneously believed in Christ and His teachings.

Now around this SEEING of a great truth, there gradually grew a myth, which taught that Longinus was blind, at the time of the crucifixion, and that he was cured of an actual blindness of some sort by the miraculous properties of the fluid exuding from Christ on the cross. Soon, however, it occurred to the myth makers, that a blind person would never have been employed as a soldier to watch the crucifixion, and to see that the body was not taken away by stealth, nor could such a blind man have been able to see where to thrust a lance into the sufferer crucified. Thereupon, the myth was transformed into the assertion, that Longinus was blind in one eye only, and that his one-eyed blindness was miraculously cured, or according to other versions, he had a convergent squint in one eye, and that this defect was cured by the same miraculous intervention. In either state of affairs, he was at once relieved of his deformity and of his disease by the miraculous properties of the sacred fluids.

The myth as thus amended in the course of centuries was finally accepted by the Roman Church, Longinus was decreed a saint, and as it were on parchment only, he remained thus described for hundreds of years on the library shelves of ancient monasteries.

It happened, however, about the fifteenth century that painting was re-established as a revival of art from Greece and that the miracles of Christ began to be depicted in colors for adoration in the churches on special days for saints. In this revival, St. Longinus took his turn, and the American who is curious in these matters when he visits Europe can find this incident portrayed in various galleries. In some paintings, Longinus is represented as an old man, in others young; in

(Read before the Portland Review Club, March, 1914.)

some, one eye is covered with a patch, in others, both. In one, he faces the spectator and if that person is observant he will see the squint. In some pictures where Longinus was held to be blind in both eyes, there stands behind him a younger man holding the butt of the lance with which to give the thrust. The actual deed cannot be depicted, but the suggestion is plain.

The incident of Longinus is for the curious only, but it shows how myths arise, and are finally developed into visible images for adoration. To those who are interested, the names of the galleries where these pictures can be found, will be gladly given.

To those who wonder what this paper has to do with a Review Club, I have the pleasure of saying that, hearing of a paper on the Myth from the pen of my good colleague in ophthalmology, Dr. Richard Greef of Berlin, the trachoma specialist, I sent for a reprint. After reading it and finding it of historical value, it seemed to me that I could do the author no greater favor in America than to thank him, as I do in this way, for his services to ophthalmological history.

The Zouave Jacob.

This celebrated Parisian mind and music curer is dead. Photographs depict him standing in front of his "Clinique," a gray headed and short moustached man, short and stout, and wearing also an imperial, after the Napoleonic fashion. He is dressed in a white linen coat, grayish trousers and slippers with spats of gray cloth. He holds in his hand his famous trombone, on which he used to play, or with which, as the Chinese say, he was "fond of swallowing brass." Now, although Jacob was really a mere trombonist, he managed with the tempestuous music which he poured from his machine and with his encouraging words, to cure many celebrated patients and innumerable poor, nervous patients who could get no benefit elsewhere in all of France. Amongst his patients we may mention Marshal Canrobert, the hero of the Crimean war, and Marshal Forney of the Mexican campaign with Maximilian. Jacob not only said to his patients: "Take up your beds and walk;" but he marched them along with music from his instrument. In his methods, we see suggestion and the influence of music, a doubly mental insinuation of remarkable influence on many minds. In the game of therapeutics, the Zouave Jacob was a true psychologist without, however, having the least appearance of one.

Quassia and Its Discoverer.

It is well known that Linnaeus introduced the bitter quassia into the pharmacopœia, but it is not so well known that the properties of the plant were discovered long before him by a negro in Dutch Guiana,

by the name of Quacy. From his name, we derive the word quassia. This Quacy was a slave, who was born on the coast of Guiana and carried to Surinam where he obtained not only his freedom but a large fortune. He obtained, over his fellow slaves, an enormous influence, even as a slave himself, and after obtaining his freedom, he became in their opinion endowed with supernatural powers.

He discovered, in 1730, a root endowed with stomachic and anti-febrile powers, in other words that quassia, which Linnæus was to make world renowned thirty years later. In 1774, the free negroes of Dutch Guiana sent Quacy as a delegate to the Prince of Orange to assure him of their fidelity. The prince paid all the expenses of the voyage out and sent Quacy home with the title of prince, and some beautiful clothes in which the new prince always showed himself in public.

It happened that a Captain Stedman who explored that part of South America often met Prince Quacy, and in a book of travels, entitled: "A Voyage to Surinam and into the Interior of Guiana," he has given a portrait of this negro-celebrity in his uniform given by the Prince of Orange. The genial negro is thus depicted in a red cocked hat with white feathers, a scarlet coat embroidered with gold lace, blue breeches and white silk stockings, and enamelled shoes with gold buckles.

Captain Stedman's portrait shows Quacy bowing, hat in hand, in a landscape backed up with a row of barracks and trees, and the Dutch fort, Surinam. With his handsome uniform, gold headed cane, and white wig, he is indeed a sterling figure. Quacy, the Prince, lived to a very advanced age and died from leprosy.

John Gabriel Stedman (1744 - 1797) was, by the way, an English army officer who lived several years in Guiana, and wrote this superbly illustrated work. He married a handsome colored nurse, and later a lady from Holland. He was a lieutenant colonel before he died, but, oddly enough, remained on the army lists long after death as a captain. Odd to the end, he directed that his body should be buried at midnight and by torch light in the Parish Church, in which he had long previously worshipped.

Hysterical Monoplegia.

The British Medical for December 20, 1913, mentions an interesting case of monoplegia in a young man who received a shock by short circuiting the current in screwing a bulb into its socket. Various hysterical manifestations occurred off and on for several months. The probability was that both hysteria and a malingering for pension were commingled in the long duration of the affection.

Propaganda for Reform.

Sal Hepatica. — Sal hepatica, marketed by the Bristol-Myers Co., New York, has been refused recognition by the Council on Pharmacy and Chemistry because its composition is secret, because it is advertised indirectly to the public for the treatment of diseases, because exaggerated and unwarranted claims are made for its therapeutic qualities and because its name fails to indicate its chief constituents, but does suggest its use in liver disorders. The Council authorized publication of its report because the exploitation of sal hepatica is an important illustration of the way in which physicians are being made parties to the introduction to the public of a patent medicine the indiscriminate use of which must often have resulted in harm, direct or indirect. (Jour. A. M. A., Feb. 7, 1914, p. 472.)

Mu-col. — "Mu-col for cleansing mucous membranes," is a nostrum put out by the Mu-col Company, (Inc.), Buffalo, N. Y. The following claims are made: "Mu-col obtains most gratifying results in catarrhal inflammations of the mucous membranes. Leucorrhea, tonsillitis, sore throat, cystitis, internal hemorrhoids, nasal catarrh and pus cases respond at once to irrigations with Mu-col solution. Strong solutions of Mu-col have proven of sterling value in treating hives, prickly heat, ivy poison, sunburn, eczema, typhoid and scarlet fever." Examination in the A. M. A. chemical laboratory showed Mu-col to be a mixture of sodium chlorid and borax, equal parts, with the addition of a small amount of aromatic substances. (Jour. A. M. A., Feb. 7, 1914, p. 474.)

Piorkowski Laboratories not Licensed. — The Public Health Service announces that statements which seem to emanate from the so-called Piorkowski Laboratories in various parts of the country to the effect that these laboratories have been licensed by the U. S. Public Health Service are incorrect. Instead, after inspection, a license has been refused the Piorkowski Laboratories of Berlin, Germany. (Jour. A. M. A., Feb. 14, p. 553.)

When is a Patent Medicine? While some physicians and especially some medical journals have trouble in classifying certain proprietary medicines, drug departments in department stores find the problem a simple one. In recent Chicago newspapers, advertisements for Fellow's syrup of hypophosphites, glycothymoline and sal hepatica look perfectly at home with Peruna, Circus Liniment and Beecham's Pills. (Journal A. M. A., Feb. 21, 1914, p. 631.)

Lucille Kimball Obesity Cure. — Lucille Kimball of Chicago,

comes to the obese with the message, "I can make your fat vanish by the gallon." All that is needed, she says, is to take her treatment — no dieting, exercise or drugs needed. The treatment consists of pink pills, which are reported to contain red pepper, menthol and bitters, probably gentian or quassia; brown tablets which the chemists declared to be an old-fashioned cathartic pill, and a powder, reported to consist of soap, Epsom salt and washing soda. (Jour. A. M. A., Feb. 21, 1914.)

Effect of Tartrates. — Many of the organic acids, such as citric and acetic, are burned up in the body, giving rise to carbon dioxide and water; thus sodium citrate, for instance, acts just like sodium carbonate in the organism. On the other hand tartaric acid and its salts are for the most part not destroyed in the body and leave it in their original form and animal experiments have shown that large doses of tartrates may give rise to symptoms of nephritis. However, while the claim for a certain baking powder that the tartaric acid of cream of tartar in it is "wholesome" is evidently unwarranted, W. Post has shown that in the doses in which tartrates in the form of purgative mixtures, etc., are ordinarily given, are probably without harmful effects. (Jour. A. M. A., Feb. 21, 1914, p. 616.)

Administration of Lecithin. — It has been shown many times that phosphorus in the form of organic compounds as it occurs in milk or in eggs probably changes in the body to phosphate and is subsequently elaborated into lecithin. In view of this there would seem to be no physiologic or biologic reason for preferring isolated lecithin as a medicament to milk or eggs. If it is believed that lecithin is indicated, the administration of one or two raw, or even cooked, yolks of eggs will supply all the lecithin that could be metabolized and presents it in a better manner than an artificial preparation. (Jour. A. M. A., Feb. 21, 1914, p. 615.)

Pam-ala, another worthless Quinin substitute. — According to advertisements, Pam-ala, sold by the Pam-ala Company, New York, is "A new and efficient remedy for MALARIA." Its general characters, particularly its cumin-like smell, and also the advertising claims are very similar to Sinkina, a preparation which was shown to be worthless. Most of the testimonials sent out are rather old and stated to come from physicians in Italy, Cuba, Porto Rico, Guatemala, etc. Two recent testimonials from physicians in the United States were investigated by the Council on Pharmacy and Chemistry and in each case it was found that the opinion had been based on insufficient trials and that the physicians on further use of Pam-ala had become convinced of its inefficiency. While the evidence indicated that the essential constituent of Pam-ala is oil of cumin, proven worthless in the investigation of Sinkina, a chemical analysis was not made by the Council because it was thought that the secrecy with which the identity of Pam-ala was surrounded and the extravagant and highly improbable claims were sufficient to condemn it. (Jour. A. M. A., Feb. 28, 1914, p. 715.)

New and Non-official Remedies.

Since publication of *New and Non-official Remedies*, 1913, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Non-official Remedies":—

Staphylo-Serobacterin, Strepto-Serobacterin, Typho-Serobacterin, Disinfectant Krelon, Anti-Anthrax Serum, Antistreptococcic Serum, Scarletinal, Polyvalent, Granular Effervescent Salicylos. (Journal A. M. A., Feb. 7, 14 and 21, 1914.) The H. K. Mulford Co., Philadelphia, Pa.

Corpus Luteum, Capsules; Corpus Luteum Tablets. (Journal A. M. A., Feb. 21, 1914.) Armour & Co., Chicago, Ill.

Amphotropin. (Journal A. M. A., Feb. 28, 1914) Farbwerke Hoechst Co, New York.

Since publication of *New and Non-official Remedies*, 1914, the following articles have been accepted for inclusion with "N. N. R." :—

Farbwerke Hoechst Co., Amphotropin.

Fairchild Bros. & Foster., Trypsin.

Hynson, Westcott & Co., Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampoules, H. W. & Co.

Fairchild, Essence of Pepsin.

Costs of National Insurance in England.

The English government claimed that on the 15th of November, 1913, thirteen million people were insured against disease, and were attended by twenty thousand physicians, whose income from medical care of the insured in the previous full year from 1912 made an average of \$1,600 a year.

Clifton, New York, Medical Bulletin.

We have received the current number of the *Clifton, New York, Medical Bulletin*, Number 4, Vol. 1, issued by the staff of the Clifton Springs Sanatorium, an institution of many years renown and headed now by Dr. James Gregory Mumford, formerly of Boston, and the well-known author of many medical and surgical works of great value to the profession. Two editorials in this number, one "On the Hospital and the Patient," and another "On Fee Splitting," are of a high standard of thought. The book notices are very valuable, carried on as they are at a lofty level of discrimination and criticism.

County News.

CUMBERLAND.

PORTLAND MEDICAL CLUB.

The sixth meeting of the year was held at the Columbia Hotel on Thursday evening, March 5th. There were thirty-three members present.

Dr. Hatch reported a case of spina bifida, exstrophy of bladder and epispadias, and exhibited photographs of the patient, who was living at seven days.

Dr. Little reported a case of paralysis of all the muscles of the eyes, presumably from hemorrhage into the ventricle and aqueduct of Sylvius in a child who had whooping cough.

Dr. Spalding reported a case of embolus in right eye and optic atrophy in left eye, caused by injury from blow with baseball bat. He also presented several illustrated articles by Dr. Schiassi of Bologna, Italy, which were viewed with interest by the members of the club.

Dr. J. L. Maroon of Portland was elected to membership.

The paper of the evening was by Dr. Alfred W. Haskell, who exhibited some beautiful mounted specimens of diseased eyes.

ROLAND B. MOORE, *Secretary*.

FRANKLIN.

The regular quarterly meeting of the Franklin County Medical Society was held in Farmington, March 18th.

Dr. E. B. Currier of Phillips read a very interesting paper on "Some things past and present."

Dr. F. B. Colby of Rangeley read an interesting paper on "Some observations in Lobar Pneumonia." In the evening, Dr. Charles E. Norton of Lewiston, gave a very interesting and instructive lecture on "Conservation of Vision." This lecture was given at the State Normal School. The teachers and general public were invited and there was a very good attendance.

G. L. PRATT, *County Editor*.

OXFORD.

The regular quarterly meeting of Oxford County Medical Society was held at Needham's Hotel, Mechanic Falls, Monday, March 30, at 10.30 A. M.

Dr. C. E. Norton of Lewiston read a paper entitled "The Conservation of Vision," and the discussion was opened by Dr. S. L. Andrews, formerly of Rumford.

Dr. Fred P. Webster of Portland gave an informal talk on "The Practical Examination of Infants' Stools."

D. M. STEWART, *Secretary*.

PENOBSCOT.

The regular meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday evening, March 17th, 1914.

There was an unusually large number present to hear Doctor John L. Morse of Boston address us on the subject of "Infant Feeding and Diseases of the Digestive Tract in Infancy."

Four new members were voted into the Association: Drs. W. C. Hall of Orono; L. M. Pastor of Bangor; W. E. McDougal of East Millinocket, and Willis L. Hasty of Hampden.

Doctor Daniel A. Robinson, chairman of the library committee, reported that things looked bright for the establishment of a county medical library.

A letter from Doctor H. W. Miller, formerly Superintendent of the Augusta State Hospital, was read, expressing his appreciation of the Resolutions passed by this Association, occasioned by the action of the governor, in demanding his resignation.

J. B. THOMPSON,

County Editor.

Personal News and Notes.

Dr. H. H. Crane of Bangor is out after a six weeks' illness with pleurisy.

Dr. C. H. Burgess was operated on for appendicitis a few days ago. He is doing well.

Dr. Spalding of Portland, read a paper on "Conservation of Vision," before the young ladies of the Normal School at Gorham on Wednesday afternoon, March 18. In this way, the campaign of the A. M. A. is being steadily continued with beneficial results.

The March meeting of the Waterville Clinical Society will be held at the Elmwood Hotel, Monday evening, March 16, at 8 p. m.

The paper of the evening will be read by Dr. Alfred Mitchell, Jr., of Portland, the subject being "Bladder Tumors and Hæmaturia." The paper will be followed by a Dutch lunch, for which each member will be assessed 50¢.

The Board of Registration met in Portland, March 10th and 11th. Sixteen candidates took the examination.

The Committee on Cancer of our State Association, has succeeded in doing some quite efficient work during the past few months in the line of educating the laity upon the necessity of the early recognition and treatment of this disease, the purpose for which this Committee exists. Dr. Frank H. Jackson of Houlton, Chairman of the Committee, assisted by other physicians in his vicinity, have held several public meetings in the eastern section of the State, which have been well attended. On the 25th of March, a most interesting and instructive address was given in Portland before our Woman's Literary Union, by Dr. Edward Reynolds of Boston, Vice President of the American Society for the control of Cancer. Not only were press copies of this address issued in our local papers, but copies were sent to a dozen different papers through the State, to be issued in their publications. Our Committee feel that they have done good work this season.

The Chicago Medical Society will hold its third annual meeting of alienists and neurologists of the United States, for the discussion of mental diseases in their various phases, July 14th to 18th, 1914.

It is the object of the Society:—

First:—To have a scientific program. The titles of papers already received for this meeting, indicate such a program, including research work, that will be beneficial to every physician, whether connected with an asylum, sanitarium, or in general practice.

Second:—One that will be educational to the public as well, therefore, one day is to be devoted to the discussion of the prevention of insanity and the conditions causing mental defectives, to which the public will be invited.

Dr. Laura Black Stickney has been elected city physician of Saco for the year ending March, 1915.

Dr. Omer E. Boivin has been elected city physician of Biddeford.

The Daughters Hygeia held a meeting on April 2nd at Kennebunk, Mrs. Dr. Lord being the hostess of the day. Many matters of interest to the society were discussed and the regular business transacted. A fine dinner was enjoyed at the Mousam House, after which the members returned to Mrs. Lord's, where a pleasant hour was passed, a dainty lunch partaken of, and after one of the pleasantest meetings of the society, the members separated for their several homes, feeling that many thanks were due Mrs. Lord for her untiring efforts in their behalf. The following committees were appointed: *Sick Committee*—Mrs. C. F. Lord, Kennebunk; Mrs. C. F. Kendall, Biddeford; Mrs. W. W. Smith, Kennebunk. *Press Committee*—Mrs. C. E. Landers, Alfred; Mrs. D. E. Dolloss, Biddeford.

Obituaries.

Charles L. Randall, M. D., a well-known physician of Waldoboro, Lincoln County, Maine, passed away suddenly in Tampa, Fla., early Sunday morning, March 22d. Death was due to heart disease, resulting from rheumatic fever and nephritis. The deceased was a native of South Limington, York Co., and was 56 years of age. He was the son of the late Noah Randall and one of seven children. Dr. Randall graduated at Limington Academy and was a teacher for a few years. Later he was engaged in institutional work in various State charitable institutions and asylums in Massachusetts, including the Tewksbury almshouse, where he became interested in medical studies. Having decided to become a physician, he settled upon a course at the College of Surgeons in Baltimore, Md., and graduated there in 1894. He began the practice of his profession in Cornish, Me., where he remained only a few months, and then located in Standish, remaining there about six years. From there, he went to Waldoboro and purchased a large estate of about 80 acres, which he managed and was much interested in agricultural pursuits, in addition to an extensive medical practice. Failing health caused Dr. Randall to discontinue his professional labors and several months ago, he sold his property in Waldoboro and went South in pursuit of rest and health. He seemed to improve for a time and his sudden death was unexpected by his relatives and friends in Maine. Dr. Randall was a Democrat in politics and was for many years a member of Adoniram lodge of Masons in Limington. He is survived by his wife, two sisters and two brothers, one of whom is Dr. Jesse A. Randall, Bowdoin Med., '88, of Old Orchard. The body was brought to Maine as soon as possible and interment will be made finally in the family lot in South Limington.

Dr. Walter E. S. Preston died in Newfield, Me., Sunday, March 15. He was nearly 56 years of age, having been born in Bradford, N. H., May 3, 1858. He was a graduate of the New Hampton (N. H.) Literary Institute; received degree of A. B. at Baldwin University in 1880; also A. M. in 1882; M. D. at Dartmouth in 1888. Dr. Preston was principal of Limerick Academy in the early 80s before he began medical practice. He located in Limerick, where he was a well-known and prominent physician for about 25 years. Later he went to Newfield, where he passed away after an illness of short duration. Cardiac disease is stated to have been the cause of his death. Dr. Preston is survived by his wife and four children.

**Program of the Maine Medical Association.*

*The Sixty-second Annual Meeting,
June 10 and 11, 1914.*

Annual Oration—"Value of Social Service Work in Hospitals as a Part of Efficient Diagnosis and Treatment,"

Richard C. Cabot, Boston, Mass.

Sterilization of the Unfit,

H. M. Swift, Portland

Surgical Kidney,

John Sturgis, Auburn

Heart Stimulation,

Charles Hunt, Portland

Pellagra,

H. L. Bartlett, Norway

Pneumonia,

Edward C. Cook, York Village

Secretion of Hexamethylenamin,

C. M. Robinson, Portland

Visceral Ptosis,

Richard F. Chase, Boston, Mass.

Conservation of Vision from the Point of View of Ophthalmia, Trachoma, Gonorrhœa and Syphilis,

H. T. Clough, Bangor

Salvarsan,

H. R. Tuttle, Tewksbury, Mass.

*Members who wish to offer voluntary papers or reports of cases are requested to communicate with F. Y. Gilbert, Portland.

Chap. X, Sec. 2. All papers read before the Association or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

The Cumberland County Committee are making arrangements similar to last year for the entertainment of the visiting ladies. Every effort is being made to surpass last year, and it is urgently requested that all members who will be accompanied by ladies will notify Dr. Joeseth Drummond, 156 High St., at the earliest possible date, so that all necessary arrangements can be made.

= = WANTED = = **OCULISTS' PRESCRIPTION WORK.**

We offer the facilities of a large shop.
Every order receives the personal attention of one of the firm.
Only the best of material is used and we never substitute.
The small orders are appreciated as well as the large.
A trial will convince you of our accuracy and promptness.

THE SMITH-SOMES CO.

... OPTICIANS ...

578 Congress Street,

Opp. Congress Square Hotel

ANNUAL MEETING, PORTLAND, JUNE 10 & 11

THE JOURNAL OF THE Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

MAY, 1914.

No. 10

*CONSERVATIVE TREATMENT OF CHRONIC SUPPURATIVE OTITIS MEDIA.

DR. JOHN H. ALLEN, PORTLAND, ME.

There exists among the laity and I think to a certain extent with physicians, as well, a feeling that treatment of chronic running ears other than operative, is not of much avail. Such a conviction, I think, is not warranted, and I would like to speak of certain conservative methods of treatment, which will suffice, in the majority of cases, to produce a cessation of the discharge and a consequent immunity from the serious danger which exists in every running ear. The indifference frequently exhibited by physician and patient alike, to the grave menace residing in a chronic suppuration in this locality, is probably to be accounted for, not only by ignorance on the part of the patient, but by the feeling held by both, that interference will be of little use, and that this impression is justified by the futility of ordinary treatment, there is no doubt. Such measures as syringing the ear in the usual way, either with plain water or with antiseptic solutions; or the so-called dry treatment, which consists in drying the ear with cotton and insufflating powder of one kind or another, while admirable as measures of ordinary cleanliness, have little or no effect on the underlying condition. This sort of treatment barely touches the surface of the disease. It is ineffectual in the same way that an attempt

*Read before the Portland Medical Club, October, 1913.

to extinguish a fire inside a house by playing water over the outside is ineffectual. In order to accomplish much, you have got to get *into* the house, find out the seat of the conflagration and attack that. To continue the comparison further, the materials used are of less consequence than the manner of their use. A shovelful of earth or a rug in the right place will answer as well as a bucket of water, but either one is of infinitely more service, applied to the exact seat of such a lesion within the household, than would be tons of water applied to the outside.

In order to be effective any form of treatment must be preceded by a most minute, searching, almost microscopical investigation of the exact condition present, and there should then follow a careful, painstaking, thorough application of remedial measures, sometimes antiseptic, sometimes mechanical, and sometimes simply cleansing, but always applied, as far as may be, to the exact seat of the pathological condition present.

It would be a hopeless task in a paper of this kind to attempt any systematic description of the infinitely varying conditions found in these cases. The pictures presented are of endless multiformity. The process may be of six months' or of sixty years' duration, and the changes in the one of longer duration, slight, while, in a brief existence, very great destruction may have been wrought.

The solution of continuity in the membrana tympani may amount only to a pin-point perforation, while, on the other hand, the whole structure may have disappeared. The mucous membrane lining the tympanum may be infiltrated and thickened or it may have undergone degenerative changes with the formation of granulations or of distinct polypi in any part of the middle ear cavity or in the canal. The ossicles may any or all of them be partially or completely destroyed, and any portion of the bony wall may be carious. The discharge may be copious or scanty, sero-purulent and thin, or muco-purulent, thick and stringy. It may be odorless or foul. In some cases, the recesses of the tympanic cavity are filled with cheesy masses or with cholesteatomata.

As has been said, the pictures presented vary infinitely. No two are alike and the determination of the condition present in any given case, will usually require the most careful scrutiny, often with the aid of the lens, and a painstaking interrogation with a probe of every perforation, polyp, nook and cranny in the tympanic cavity. Caries must be sought for with the probe. The presence or absence of ossicles and the condition of those which may be in place ascertained. The hearing must be tested, the eustachian tube catheterized and the condition of the nose and nasopharynx examined.

Treatment follows logically and closely the conditions as ascertained in each individual case. It is impossible to lay down any very definite rules of treatment, as each case differs from every other. With the exception of removal of polypi and the destruction of granulation tissue when these are present, the treatment is for the most part a cleansing one. As to its application, perhaps a better idea can be given by the details of a few cases, than would be possible by a general description.

Case 1. A woman twenty-three years of age. She had had more or less constant discharge from the left ear since she had diphtheria at two years of age. For a week prior to her first visit, she had had severe pain at intervals, of sufficient intensity to prevent sleep for at least one entire night. There was a muco-purulent discharge, which was syringed out. The fundus of the canal showed much swelling both of the membrana tympani and the adjacent canal walls. Through a perforation in the upper portion of the membrana tympani protruded a polyp which entirely filled it, preventing the free escape of pus. The hearing distance was 1/50 of normal. At the first visit the membrana tympani was slit on both sides the polyp to allow free drainage. The following day, the patient reported severe pain all night, and continuing to the time of her call. At this visit, a portion of the polyp was removed with biting forceps as far as it could be reached and sufficiently to free the perforation. On the next day the patient reported no further pain. At several subsequent visits at daily intervals, the ear was cleansed with hydrogen peroxide and the stump of the polyp cauterized once or twice with solid stick silver nitrate. At the end of two weeks and after having seen her eight times, the swelling was sufficiently reduced to permit of the removal of the remainder of the polyp with forceps. At intervals of three or four days, the stump of the polyp remaining was cauterized through the perforation and the patient used daily instillations, at home, of boric acid in alcohol. At the end of six weeks and after thirteen treatments the polyp had disappeared but there still remained a slight discharge. The attic was then syringed through the perforation in Shrapnell's membrane with a weak solution of peroxide and then thoroughly dried out with cotton wound on a fine silver probe and passed into the attic and antrum, followed by a dusting with boric acid. On the following visit, the discharge had decreased and the same treatment was repeated for two subsequent visits, at the end of which time the ear was dry and has continued so since, two and a half years, without further treatment. The voice which was heard at six inches only can now be heard at six feet.

It should be said that while hydrogen peroxide, as in the above

instance, is employed in many of these cases, it should be used with considerable circumspection; usually in dilute solution, seldom in any considerable amount and never unless it is certain that there is ample room for the escape of the resultant gas. The writer regards as very dangerous the not uncommon practice of instilling peroxide into ears, the condition of whose fundus is not well known, and of giving the same to patients for home use.

Case 2. A woman of thirty years. — The right ear had discharged all her life, as long as she remembers, without intermission. Last summer, she had an attack of severe pain for two or three days.

There was a thin, brownish, foul discharge of moderate amount. The M. T. was destroyed. Filling the middle ear cavity and extending into the attic blocking the discharge of pus from above, was a sessile polyp about one c. m. in diameter. She heard the voice at one foot. The polyp was removed in pieces with a snare and biting forceps at several sittings at daily intervals and an accumulation of debris was curetted from the attic, including the remnant of either the incus or malleus. This sequestrum was about one-fourth the size of the normal bone and was so mutilated by the necrotic process that it was uncertain which ossicle it represented. With the exception of a pin-head size polyp in the niche of the oval window, this left the ear pretty clean. The discharge rapidly decreased with dry cleansing with a cotton stick, of the attic, which at the end of two weeks, remained entirely dry. No attempt was made to remove the granulation at the oval window, which was treated by an occasional dry cleaning of the very slight moisture present and dusting with boric powder. In another week this had shrunk so that the head of the stapes could be seen in the niche. After an interval of three weeks, the discharge was represented by a thin dry crusting over the oval window, upon removal of which a point of moist granulation was still visible. This discharge soon ceased, and the ear has now been dry for nearly five years.

Case 3. A woman thirty-nine years of age. — There had been an intermittent discharge from both ears since childhood. There was a muco-purulent odorless discharge from both ears at the time of examination. She heard only a shout with the right ear. With the left, she heard a low spoken voice at six inches. The right ear-drum contained a perforation 4 or 5 m. m. in diameter in the post inf. quad, through which a small polyp protruded. The polyp was snared, its base cauterized, and boric powder insufflated. At several subsequent visits at intervals of two or three days, the ear was catheterized, cleaned with peroxide, dried and powdered, and the base of the polyp cauterized once or twice. On the fifth visit the ear was still slightly moist and was treated with boric acid and alcohol. On the eighth

visit the ear was dry. No further treatment was given the right ear but as the treatment of the left ear was continued the perforation was observed to gradually grow smaller and was found closed 43 days from the beginning of treatment. A low spoken voice could be heard at six inches.

The left membrana tympani contained a perforation of about the same size as the right in the same location. There were no polypi or granulations. The mucous membrane of the promontory was thickened and red. The ear was catheterized and boric powder insufflated. At the following visit, the ear was catheterized, the canula of the middle ear syringe was then passed through the perforation into the attic, which was syringed with peroxide. The ear was catheterized again and the attic dried with a cotton swab passed through the perforation. At the fifth visit after a continuance of the same treatment the swelling of the mucous membrane was much reduced and the discharge lessened, but the ear was still moist. At this visit the ear was syringed with gr. x. solution of silver nitrate which treatment was repeated several times during the next half dozen visits, when the discharge had ceased. This was after sixteen treatments and at the end of fifty days. Seeing her again after a month, the ear was still dry, but as the perforation showed no disposition to heal, an attempt was made to close it. The edges of the perforation were touched with a mixture of equal parts of trichloracetic and carbolic acids and at the end of a week the crust resulting from the cauterization was stripped off and the cauterizing repeated. This treatment was repeated at weekly intervals, the perforation gradually growing less, until at the end of nine weeks, the perforation was closed. The voice which was heard at six inches with this ear could now be heard at five feet. Both ears were dry, the perforations closed and the hearing serviceable.

Case 4. A man forty-two years of age. — Both ears running at intervals since childhood. Has been treated by several specialists, and has been under the care of one of these for the last thirteen years. At one time, while under treatment, the ears remained dry for two years, which is a better result than I have been able to obtain in the four years that the case has been in my hands. I will not attempt to give the details of treatment in this case as it is a long story, but will give only the main points.

There has been considerable destruction of tissue in both ears. In the right, however, the upper portion of the M. T. with the malleus is still intact, and there is no ascertainable caries of the ossicles. In the left ear there has been complete loss of the membrane as well as the two major ossicles. The object of treatment has been two-fold, — to control the discharge and to improve the hearing. When first

seen the discharge from both ears was quite free and very foul, and this has been modified to the extent that the ears remain dry for long periods, but are liable at any time to a recurrence of the discharge, especially in the winter and when the patient gets a cold. The discharge, when it does appear, is usually moderate in amount, easily controlled and is not allowed to get foul.

The left ear which was the worse, having not only extensive destruction, but an attic suppuration with an accumulation of cholesteatomatous material, has behaved rather the better, it having been entirely dry for the last six months, the attic walls hard and dry, and no evidence of reaccumulation of cholesteatoma.

The effort to improve the hearing consisted at first, in the application of artificial drums, by which means the hearing was kept at a serviceable point. These drums, in the case of the right ear, raised the hearing from six inches to ten feet, — nearly normal hearing. The hearing of the left ear was better to start with, — three feet, and it was raised to from six to twelve feet at different times. Lately the hearing has improved to such an extent that drums have not been used. During the last six months, the left ear has been entirely dry. The right has discharged once for a few days.

Case 5. A man twenty-seven years. Has had a constant discharge from the left ear without a day's cessation for sixteen years. There was a very foul muco-purulent discharge of moderate amount coming from a pin-head size perforation in the anterior portion of the ear drum. In the sulcus next the ear drum in the floor of the canal was a small amount of granulations.

At the first visit the ear was syringed with peroxide and the granulations cauterized with silver nitrate. At four subsequent visits the ear was catheterized, blowing the pus from the middle ear into the canal which was then cleaned with peroxide.

Up to this point the discharge remained about the same. At the next visit, the ear was first catheterized. A fine bent canula was then inserted through the perforation, and the middle ear washed out with normal salt solution. It was then catheterized again and dried out. The same treatment was carried out for the six following visits, during which time the discharge grew gradually less, and at the twelfth visit on the twenty-seventh day of treatment, the ear was found dry, and at the end of three months without treatment still remains so.

I might say that in all cases, treatment of the nose and nasopharynx, wherever necessary, accompanied treatment of the ear itself.

In conclusion, I would say that these cases represent fairly, I think, the average of such cases, and that the average case will respond

to treatment in a somewhat similar way. In other words, seventy to eighty per cent of all chronic suppurations of the middle ear may be cured in a reasonable time by such simple methods as have been used in the cases referred to.

In support of this statement, I will quote statistics of 600 cases of chronic suppurative otitis media.

84 cases had discharged less than one year; 51 were cured in less than one month; 25 required more than one month; 90% cured in all.

231 cases had discharged more than one year and less than ten years; 62 cured in less than one month; 92 required more than one month; 67% cured in all.

113 discharged more than ten years and less than twenty years; 28 cured in less than one month; 58 cured in more than one month; 76% cured in all.

142 discharged more than twenty years; 41 cured in less than one month; 66 cured in more than one month; 75% cured in all.

*CONSERVATION OF VISION.

BY FRANK Y. GILBERT, M. D., PORTLAND.

In the opening of this paper, I can do no better than to quote you the first paragraph of the circular letter sent to the Chairmen of the State Lecture Bureaus outlining a plan of campaign for the Conservation of Vision. "The lectures on the Conservation of Vision are given under the auspices of the Committee for the Conservation of Vision, a committee of the Council on Health and Public Instruction of the American Medical Association. The committee hopes to have a lecture on Conservation of Vision delivered at least once a year in every county of every State. A Lecture Bureau Manager has been selected in each State, who, with his associates, will have charge of the lectures in his particular State. The intention of the lecture is to arouse the people to the necessity for the conservation of vision. To this end, it will be necessary to dwell upon such subjects as ophthalmia neonatorum, the medical inspection of school-children, the adoption of means to prevent ocular injuries in shops, factories, etc., the proper illumination of schools, halls, homes, trains, etc., the adoption of means to prevent the spread of trachoma, etc."

*Read before the Portland Medical Club, Feb. 5, 1914.

I would like to say a word here about the Council on Health and Public Instruction. It is composed of a body of men, prominent in their respective fields and particularly interested in Health work. Those whom I have had the pleasure of meeting have shown great interest in these public questions and follow their own reason and judgment. The inference that the Council on Health and Public Instruction or on Pharmacy are dominated by any political element in the A. M. A. is unjust and unwarranted. On the other hand, any one, who will review the immense amount of work carried on by these Councils during the past few years, will come to the one conclusion, viz:—they have done wonderful work. If we were to follow the line of thought further, we would find one or two enthusiastic men in charge, serving a secretary, who have been the life of the work.

The National Committee on Conservation of Vision has appointed one oculist in each State to serve as the State committee man to carry out some systematic plan of campaign in his State. Dr. Spalding represents Maine and is giving liberally of his time and energies to this work, but he needs the co-operation of all physicians to make the work effective and with this end in view I have ventured to devote my time to this subject.

There are approximately 700 blind individuals in the State of Maine, or a ratio of 1 to 1,000, while a large per cent of the total population have one practically useless eye. The same ratios hold in the other States, varying according to the hazardous occupations. Among the causes of blindness are Ophthalmia Neonatorum, which holds the most prominent place, averaging 25% to 28%; Interstitial keratitis; Iridocyclitis; Congenital cataract; Choroiditis; Choroidoretinitis; Neuro-retinitis; Optic nerve atrophy; Wounds; Buphthalmos; Myopia with Choroidal atrophy, etc.

OPHTHALMIA NEONATORUM.

Most authorities are agreed that probably 90% of the blindness from Ophthalmia Neonatorum is needless and preventable. With our present day knowledge, there should be little or no blindness from this cause, but how is it to be accomplished? The only answer is education. Teach the lay public that discharging eyes in infancy require immediate attention, not that they are necessarily of gonorrheal origin, but it is an abnormal condition which may lead to serious results without warning. The oculist too often serves as a court of last resort when it is impossible to accomplish any result.

It is generally conceded that the instillation of 2% nitrate of silver in a child's eye immediately after birth will prevent the un-

fortunate after results, and I believe that such a procedure should be made part of the obstetric nurse's training. She should be expected to carry out this procedure without orders from the attending physician. If the physician, of course, wishes it omitted he can so instruct the nurse and assume all responsibility.

Physicians, who are in any way familiar with this class of cases, must recognize the extreme importance of early treatment. Thorough cleansing with saline solutions and the use of silver nitrate or some silver salt, if treatment is begun early enough, offers the best results. The cornea should be watched very closely and atropine used if there is any involvement. The fatal cases are those where the cornea becomes involved during the active stage of the disease, when the lids are swollen and circulation interfered with. Cases where treatment has not been started before the corneal involvement are usually fatal. It should be borne in mind that the time between the appearance of the first redness and discharge to the involvement of the cornea may represent only a matter of days or even hours.

It has been stated that at least two in every hundred inhabitants in a large city suffer from some form of gonorrhea. Whether we believe this or not, we must recognize the fact that 75% to 90% of our present blindness, due to this cause, is preventable and requires our attention.

It is a well recognized fact that every individual is careless to some extent and that it is contrary to all laws of human nature to allow any fellow being to suffer needlessly and particularly where that suffering may terminate in physical infirmity. It is oftentimes an economic problem with two sides, that of the individual who may not be able to pay for professional services, and that of the community which foresees a possible pauper charge. These are worthy cases for our charitable institutions and the community, as well as the patient, will benefit by them.

MEDICAL INSPECTION.

In the transactions of the 15th International Congress on Hygiene and Demography, Dr. W. S. Small of Washington speaks as follows of medical inspection: "The broadening of the scope and purpose of medical inspection of schools is as striking as its geographical extension. To its work with infectious diseases was quickly added the work of caring for skin diseases and uncleanness. Next it began the examination of children for the discovery of defects and infirmities that retard development and reduce the school efficiency of children. Soon it essayed the task of examining all pupils not only for the pur-

pose of diagnosing seriously defective conditions, but also for the purpose of charting, as it were, the physical values of all pupils. Coincident with this work of examination and investigation has developed an appreciation of the real significance of medical inspection. Its true mission is seen to be the general upbuilding of the health of children in school. Medical inspection is fast becoming health supervision. It is formulating a comprehensive program for the conservation of the health and efficiency of children in the schools. It is organizing agencies not only to remedy defects and to effect cures, but also to improve the hygienic conditions of school life."

The problems with which this paper deals are related to school life as follows:—First, the eyes as related to the general health; second, the question of securing the least possible eye-strain during the school and college years; and third, the question of illumination. Either of these subjects would supply material enough for a paper and I trust you will pardon my hurried remarks.

The human eye can not be considered as an individual unit and so treated but must be considered as an organ which has many and complex relations with other adjoining structures and susceptible to changes in the general health. For instance, a student of the so-called strumous type will suffer from eye defects but, in the majority of cases, not out of proportion with some other structures such as the tonsils, adenoids and lymphatic glands.

This is best illustrated in the phlyctenular types of eye disease. Before the involvement of the cornea, the vast majority of these cases would clear up under cleanliness, proper hygiene and constitutional treatment.

Many ailments are attributed to eye-strain but perhaps the most prominent are faulty position and pathological changes. The near-sighted person as well as the extreme far-sighted person must hold his work close to the eyes. In the latter cases, there is a marked squinting or closing of the lids. These students must, of necessity, bend far over their work, thus assuming faulty positions, as seen in school life, and becomes an important factor in child development. All cases of spinal deformity should be carefully refracted to ascertain whether or not oblique astigmatism is a factor in the faulty position assumed.

Medical inspection has done much for these manifestly defective pupils in that it prohibits their attending school until everything possible has been done to improve their physical condition, but there remains a distinct class of cases having varying degrees of far sight with sufficient accommodation to overcome it for distant tests but insufficient for near work. The school inspectors must give them a

clean bill, so to speak, because they will read normal and over as tested by the charts. This is also true of some cases having astigmatic errors. A certain number of these cases can be detected by red lids with or without crusts, chylazion, or conjunctivitis, occurring after constant use of the eyes. Still others complain of headache and burning sensations about the eyes.

During school or college life, the student should be given every possible opportunity to work with the least possible strain, allowing the eyes to develop as normally as other organs. If we give such a student the maximum time for study, as laid down in the school work we will probably find that the increased effort of accommodation combined with the ordinary strain will produce certain changes and account for obscure conditions found in adult life.

ILLUMINATION.

The question of illumination plays a large part, both in youth and adult life. In a paper on the "Relation of Illumination to Visual Efficiency," by Dr. E. M. Alger of New York, I find a most interesting and complete discussion of this question. I would recommend to those interested in this subject to send to the American Medical Association for "Conservation of Vision Series, Pamphlet 4." We are quite convinced that daylight is the best and it is an accepted fact that the north light is the most uniform but modern conditions render it necessary to use artificial lights, particularly during the short days. Light falling on the retina produces photo-chemical changes proportional to the intensity of light and length of exposure. It may be so dim that it produces no changes or it may be so intense as to exhaust the visual purple and render the eye temporarily blind. Variations in color depends on the length of wave, but independent of the visible spectrum, there are waves longer than red and shorter than violet which produce chemical changes. To these rays may be attributed some of the obscure eye conditions, such as opacities in the lens, and other media, and even the uveal tract. Moving pictures necessitate constant adjustment of accommodation, owing to the rapid variation in intensity and so produce fatigue. The same will be true of any flickering light which causes contraction of the iris at frequent intervals.

Dr. Alger writes as follows on artificial lighting: "As compared to daylight, artificial light has some obvious disadvantages, but some advantages as well. A north light has an enormous volume of light of not very high intensity (from 2 to 3 candle-power) but it is so diffused that it gives an even, steady illumination. Most artificial lights have a small volume and a high intensity, so that the area near

the light is overlighted, while that farther away is correspondingly dark. A Welsbach mantle has an intrinsic brilliancy of 35 candle-power per square inch, while that of the tungsten filament itself of the electric incandescent is not far from 1,000 candle power. In daylight, the shadows all fall in the same direction and are of equal density, while such uniformity is impossible with artificial lights. Furthermore, the spectra of artificial lights are never exactly like that of the sun, so that each one has its own peculiar effect on color values. Most artificial lights contain a much larger percentage of the violet rays, which are correspondingly irritating to many eyes, while experiments show conclusively that ocular fatigue comes on much more quickly than with daylight. But the advantages of having a light which can be used just when it is wanted, just where it is wanted and in the exact quantity and form desired are so obvious that illuminating engineers have long been engaged on the fascinating problem of constructing a light which should, in as many respects as possible, be like that of the sun and yet be subject to human control. So far they have not succeeded, but the immense advances that have been made in the last decade give us every reason to hope that we shall eventually reach the goal. Three types of artificial lighting are in general use: the direct, the indirect, and the semi-indirect. In the first, the light is designed to fall directly on the work. In the second, it is directed first upon the walls and ceilings and thence reflected to the work, while the third aims to combine the two, part of the light being thrown on the work and part on the walls. Each method has its advantages and its disadvantages, which will be alluded to later on. But from the physiological point of view, the efficiency of a lighting system can be judged in two ways, from its effect on visual acuity and from its effect on endurance. The interesting laboratory experiments of Ferree seem to show conclusively that, so far as mere acuity is concerned, it is higher in daylight than under any artificial light of the same candle-power, while the indirect, the semi-indirect and the direct follow very closely together in the order named. When it comes to endurance and distinct vision for a period of time, diffusion seems to be by far the most important element of light. In daylight and in the indirect system which gives the best diffusion, the eye does not tire readily, but maintains its efficiency through a very wide range of intensities. Under semi-indirect lighting, the eye tires rapidly, except when the light is maintained at about 1.7 candle-power, which, however, does not permit the maximum visual acuity. For the direct system no intensity could be found at which the eye did not lose a great deal of its efficiency after a period of work." The problem of illumination must go hand in hand with school life and continue through adult life as one of the most prominent factors in conservation of vision.

ACCIDENTS.

The vast majority of accidents to the eyes occurring during youth are the result of carelessness. Pointed sticks or instruments, so-called pea shooters, and air-guns have played a responsible part. Chemicals such as ammonia (concentrated), acids, fumes of wood alcohol are dangerous to leave about improperly labeled, owing to the fatal results from instillation in the eyes. In cases of this kind, the best remedy would be a thorough cleansing of the eyes with a profuse amount of salt solution. Not long ago, I was called to the infirmary in the early evening to see an accident case. This proved to be a boy about ten years old with a perforation wound of the globe. It was necessary to do an enucleation. Just before my arrival, a man was admitted and examination showed a large perforating wound produced by a piece of wood flying from a rotary saw. This eye had to be removed. Before leaving, a third case was admitted. This was a man who was blown up by dynamite some few months previous. One eye had to be removed and the second was practically blind. He wanted some operation done to secure vision in the remaining eye. At that time, I had a boy who was shot in the eye by the careless handling of a gun, resulting in the total destruction of the globe and subsequent enucleation. Also a girl suffering from the end results of an ophthalmia viz. glaucoma, which terminated only on enucleation.

It is quite unusual in my experience to have on hand, at one time, a similar series of fatal accidents and, in going over the histories, I am quite convinced that all were needless and, with a little caution, could have been avoided but are now handicapped for life. A slight accident to the remaining eye may result in blindness.

There are numerous accidents from hammering steel and iron from which splinters of metal fly and usually penetrate the globe. Many of these can be removed with a magnet, provided they are small and have done little damage to the anterior part of the globe. Copper and brass are soft and rarely fly. Pieces flying from an emery wheel are frequent causes of trouble but rarely effect more than the superficial layers of the cornea or conjunctiva. The wearing of protective glasses would be preferable and should be recommended. It is rare to have a fatal accident from a lens broken while being worn.

From the U. S. Bulletin of Labor, No. 112, page 145, we read as follows:—"It is the duty of the employer to furnish a reasonably safe place for his employee to work; but if a machine which is a necessary part of the equipment is unsafe, because not sufficiently protected to prevent contact with it, and the employee has full knowledge of its condition, and takes charge thereof; with the other ma-

chinery, without objection, and is injured by coming in contact with the exposed machine, he will be held to have assumed the risk of such injury." In other words, the employee must take his chances and suffer the consequences of his carelessness. Many States have passed laws requiring employers to install various devices to protect the laborer. On the other hand, large industries, employing many thousands, have carried on an educational campaign, thereby instructing the employees where danger lies and how to avoid it. In so doing, they have lessened the number of accidents and consequently the number of law suits which renders it an economic problem.

At the International Congress on Hygiene and Demography, Dr. George Gould read a paper on "Eye strain and Occupational Disease," and the following is a quotation:—"Concerning straining of the eyes in industries, the author speaks of the now forgotten truth that the eyes are the most delicately constructed and noble organs of the body; he emphasizes the reasons for such strain as follows:

1. By long-continued looking at small objects, mentioning especially watchmakers, typesetters, embroiderers, lace-makers, miniature painters, manuscript copyists, engravers, and so forth.

2. Work with harsh colors, or upon highly illuminated objects.

3. Labor under poor or fluctuating illumination, such as by flickering oil or candle lights, and if long continued, even with good lights.

4. Sudden change from darkness to light.

The diseases resulting from these abuses are thus listed:—

1. Shortsightedness from work on minute objects.

2. Inflammation of the external parts of the eyes, and, later, of the internal parts, leading to loss of vision and cataract.

3. Visual deterioration, murosia, deep-seated pain of the eyes, — more frequently intense headache."

Although the author is an extremist, as shown in his paper, he has given the subject careful consideration and offered much valuable material.

TRACHOMA.

I should like to touch on one more subject before closing, and from the Bulletin of the U. S. Public Health Service, 1912, I will read the results of some investigations in connection with trachoma.

TRACHOMA IN KENTUCKY.

"The counties investigated were Knott, Perry, Leslie, Breathitt, Owsley, all lying in the mountainous part of eastern Kentucky, and Clark, which is in the Blue-grass region bordering the mountains. A

total of 3,974 persons were examined, 500 of whom were found to be suffering from trachoma, or over 12½%. These figures represent only cases in which a positive diagnosis was made, as all suspicious cases were carefully excluded. While, as a rule, only the rural schools were in session, it is thought that a sufficient number were visited to give a fair idea of the amount of the disease present in each county, the percentage of infection among the pupils being taken as an index of the general situation. The majority of the persons examined were therefore children, but opportunity was also taken to examine the teachers, persons in the vicinity of the schools, and, whenever found advisable, homes of suspects were visited, and people on the roadside examined. Different portions of the same county vary as to the percentage of trachoma present. In one, for instance, it is estimated that 40 families, or about 300 persons, reside on one creek. From 60 to 75% of these families were infected with trachoma, the proportion in each family varying from a few cases to all its members. The disease was less prevalent in the towns, but in at least one instance trachoma was found by Dr. McMullen in more than 50 persons residing in and about the town where he was stopping.

The disease was found in all possible aspects, from the acute onset of a few weeks' duration to the terminal stage of cicatrization and total blindness. Many of the cases had existed for a long time, and not a few for 40 or 50 years. The source of the original infection is obscure, but the disease has undoubtedly been present beyond the recollection of the oldest inhabitants. Unsanitary habits among the poorer class of people have been instrumental in the spread of the disease."

Dr. J. A. Stucky of Lexington, Ky., in a paper before the Minneapolis session of the A. M. A., speaks of his clinic as follows: "Of 374 cases seen at the clinic in September, 1912, 113 had trachoma; 40% had corneal complication; 25% had symblepharon; 25% had impaired vision, ranging anywhere from slightly defective vision to total blindness. All these were sequelæ of the disease."

TRACHOMA IN MINNESOTA.

"The investigation was begun at the Indian reservation of White Earth and Leech Lake, special attention being devoted to the Indian boarding and day schools on the reservations and the public schools contiguous to them.

The total number of Indians examined was about 545,253 of whom a percentage of 46.1 were found infected with trachoma. Of 413 Indian school children, 127, or a percentage of 30.7, were also so

infected. Suspicious cases were not taken into account in compiling these figures.

Out of 1,428 pupils in the public schools examined, only 3 cases were positively diagnosed as trachoma, 6 others being considered as suspicious.

Conclusions were derived as follows:—Trachoma has not spread from the Indian to the resident white population, this being due to the lack of association between the two races; the public school may contribute to the spread of the disease, chiefly through the attendance of mixed-blood pupils. The only cases found in the public schools were in pupils with mixed blood. As 'mixed bloods' attend public schools in considerable numbers, and trachoma is quite prevalent among them, the danger from this source becomes apparent."

In the recent investigations of trachoma among the Indians in this country, the reports show that out of 39,231 examined, 8,940 or 22.7% had trachoma. Oklahoma with 3,253 Indians examined showed 2,235 or 68.72% infected. The investigation covered 25 States and concludes in pointing out the dangers of the present tendency of gradual merging with the white race.

During six years, from 1907 to 1912, there were 6,657 cases of trachoma certified at Ellis Island, N. Y., an average of 1,100 annually. This is the gateway for about 75% of our emigrants. It is safe to assume that if this number are turned back from our shores suffering from this disease sufficiently far advanced to make a positive diagnosis, there must be a large number who have been exposed to the disease in transportation and allowed to enter.

In closing, I wish to quote at random from the report of the Missouri Association for the Blind, which gives us some idea of what is being done along the lines of "Prevention of Blindness."

PREVENTING BLINDNESS.

"The Association's work for the prevention of blindness has been along three lines: education, legislation and proper treatment of individuals with eye diseases.

A number of illustrated lectures have been given, and carefully prepared literature has been published. At the Child Welfare Exhibit, screens picturing dangers to sight were exhibited and explained, pamphlets were distributed and lantern slides shown.

A committee on Prevention of Blindness, acting in co-operation with the Health Commissioner, is endeavoring to secure needed legislation. Missouri has a law requiring midwives to report cases of ophthalmia neonatorum, 'babies' sore eyes,' to a physician."

SAVING SIGHT.

"Authorities say abuse of the eyes, negligence, ignorance, and avoidable accidents cause *half* the blindness that exists today. Education must substitute care for abuse, common sense for foolishness, knowledge for ignorance, safeguards instead of eye-traps in industry."

"There are organizations for the conservation of eyesight in Arkansas, California, Indiana, Kentucky, Maryland, Massachusetts, New York, New Jersey, Ohio, Pennsylvania and Wisconsin. Through answers to direct inquiry, we learn, however, that their work has so far been mainly confined to public education through pamphlets, lectures, etc., except in Kentucky, Massachusetts, New York, Ohio and Wisconsin."

Massachusetts and Ohio have State Commissioners for the blind. The Massachusetts Commissioner employs a field agent to investigate this entire problem and make records of facts. The results have been a careful review of the old laws and the framing of new and more efficient ones.

Maine needs a similar body and such a movement should have the support of this and other medical bodies. There should be a health officer who would see that our present laws are complied with, especially ophthalmia.

Educational lectures should be given, while careful study should be given to the causes of blindness with a view to prevention. There should be a follow up system whereby the end results of all doubtful cases could be ascertained. In short, we should find what other States are doing to prevent blindness and care for their poor blind and, if applicable to our conditions, adopt their plans or formulate a working system of our own. This should interest us as tax payers as well as physicians.

Caesarean Section.

Those who are interested in the Cæsarean section will be interested in a brief notice in the Lyon's (France) Bulletin Medical, of a curious instance of a third successive Cæsarean section in the same woman. At the last operation, both Fallopians were ligated but at a subsequent operation necessitated for incisional hernia, the operator failed to find the ligated places and a probe passed freely through the remnants of the tubes. In spite of the ligation the woman has again become pregnant and will in all human probability become for the fourth time a subject for the Cæsarean section.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

*Editorial Comment.**Advertising.*

During the four years' existence of our State Journal, complaints have come to us, occasionally, from members of the State Association about some of our advertising contracts. Although recognizing the justness of these complaints, we have not felt in a position to eliminate these contracts until such a time as we could replace them and so maintain sufficient income to continue. During the past year, the American Medical Association established a Co-operative Advertising Bureau to look after the interests of those State journals which would eliminate from their advertising pages all articles not accepted by the Council on Pharmacy and Chemistry, and, beginning with this issue, your Journal will conform with the present standards of this organization as laid down, and all future contracts from concerns out of the State will come under the censorship of this body.

The Co-operative Bureau has more than replaced the contracts which we have discontinued and it is now up to the members of the Maine Medical Association to co-operate with the Journal and the Bureau, so far as possible, in showing some appreciation of this work. From time to time we have urged upon the members the advisability of patronizing, so far as possible, those concerns advertising in our Journal and we would like to urge still farther the value of such co-operating, as we believe, in the near future, that we can better protect the members from fraudulent dealings in that the Council can safely guarantee any transactions of the members with any concern

carrying advertising in the Journal. On the other hand, we are all desirous of having a larger and better Journal which would require more advertising pages, and, by restricting our patronage, as suggested above, we would greatly assist in bringing about the desired result.

Some of the State Journals carry sufficient advertising material to pay for the running of their Journals. Why can't we do likewise? Think this over.

Society for Promoting the General Welfare of the Deaf.

A very curious suggestion for promotion of the welfare of the deaf is at present attracting considerable public attention in England, because as it happens a society for this purpose has lately received a nest egg legacy of some \$25,000 from a generous benefactor. One of the chief aims of this society is to wage continual warfare and opposition against the quacks who advertise apparatus and cures for noises in the head and deafness, and at enormous prices for practically useless things. The income of the society is to be utilized in calling public attention to the falsehoods of such advertisements, and to urge those who are deaf to put themselves under the protection of the society, before falling into the hands of these hordes of abominable charlatans. It is notorious that even in the case of well intentioned manufacturers for aids for the deaf that their prices are inordinately high in comparison with the actual cost of their apparatus. Instruments that cost but a few dollars are unloaded on the afflicted at a profit that cannot be less than three or four hundred percentum profit. Although part of his money goes into advertising, yet the prices are exorbitant in comparison with prices paid for relief of the sight, for instance, with lenses. A pair of lenses at a cost of \$5 will enable people to see, enjoy life and literature and house work for five years, whilst for the deaf to hear, the price to start with is hardly less than \$50, say nothing of additional costs for batteries and repairs. Then again the value of such a society as we have mentioned lies in preventing the hearing of the deaf, poor as it is, from being deteriorated still farther by indiscriminate use of instruments as often happens if used too long at a time, or with too loud a tone from voice or musical instruments.

The normal ear is well provided with a set of dampers, as we may call them, in the shape of the ossicles of hearing and their appropriate muscles, together with the resiliency of the drum head, but the ear that is deaf from sclerosis of the drum head and ankylosis of the ossicles possesses no such damper, loud tones pour into it from these undamped instruments, and the hearing is diminished instead of improved, as claimed.

This society can also do its good work in preventing the sale of useless artificial drum heads; useless, because unless the drum head is perforated, no artificial drum head pushed down on an unperforated drum head will increase the hearing. In the purchase of all such useless apparatus at a high price, instruction by the society will not come amiss to the deaf.

In conclusion, we have to mention a recent visit from a patient who has for twenty years utilized successfully a bit of cotton moistened in benzoinol, and inserted once a week into a long standing perforation, with the result that she can hear ordinary conversation at a distance of several feet. Such a result obtained so cheaply is as good as any obtainable by artificial ear drums at a cost of \$10 for each pair, with yearly renewals at the same prohibitive cost.

Telephonic Rest for Busy Doctors.

A scheme of value to physicians has been on trial in Norway and Austria for two years and is now being introduced in Paris. A special operator receives messages for busy doctors, who may be or may not be at home on arrival of the message. This special operator notes the message and the sender, has it typewritten, and when the doctor who has subscribed for this sort of telephonage reaches his office he calls up Central and has his messages sent at once. In this way, a busy doctor is spared interruptions, to say nothing of a good many unsatisfactory calls from people actually asking for advice without intending ever to pay. The scheme sounds good and practicable, and perhaps we shall be enjoying the boon at some moderate rates, for many would-be patients occupy the time of the busy doctor too long, and often talk something that remains of very small value to all concerned.

Milk Investigation in Scotland.

From the report of the Science Committee of the British Medical Association as presented in the number of the British Medical for January 17, 1914, we read the conclusions reached by Dr. Mitchell on the important question of the infection of children with bovine tubercle bacillus. After a valuable and detailed description of his investigations, illustrated with various culture-pictures, Dr. Mitchell concludes that cow's milk containing bovine tubercle bacilli is the cause of 90% of tuberculous cervical glands in infants and children in and around Edinburgh during the drinking milk period of life (0 to 5 years). Attention having been concentrated so much on human infection the much more probable cause, bovine infection, demands

immediate attention. The powers vested in local authorities being grossly inadequate, it is a duty to prevent this enormous amount of tuberculosis amongst children. It is a national and no longer a merely local problem to be solved. Until a going preventive law can be carried out properly, sterilization of milk is indispensable.

Much attention should also be given to the faucial tonsils as portals of infection for bovine tuberculosis or bovine bacilli. The high percentage of tonsils in which such bacilli were found, proves the need of attending to this mode of entrance.

It would seem from this paper that the tuberculous conditions amongst the milk producing cows in Edinburgh and its neighborhood was particularly shocking in lack of supervision of the cows and in the care of the milk when shipped.

The New Italian Method of Operating for Varicose Veins of the Leg.

Dr. B. Schiassi of Bologna, Italy, proposes to cure varicose veins of the leg, for instance by injecting into them an aqueous solution of iodine, the exact formula being: iodine, 1 gram; potassium iodide, 1 gram; and distilled water, 100 grams. Of this amount, 50 to 60 c. c. are injected in the following manner. A small incision is made over the internal saphenous vein immediately below the saphenous opening, the vein is isolated and divided, the upper end being ligated, and the lower end clamped. Another incision is made over the vein below the knee, the vein again divided, and the ends clamped. The syringe is then introduced into the lower end of the vein near the knee, and the fluid injected with some reasonable force until it shows itself at the upper section of the vein. This being done, both ends of that section of the vein are ligated. The procedure is repeated upon the section of the vein from a little below the knee to the internal malleolus, depending on the situation of the varicosities. The wounds are stitched, a firm bandage is applied, and the patient put to bed for ten days.

The substance of these remarks we abstracted from a late number of the British Medical, and later on, we very kindly received from the author in Bologna a beautiful copy of his pamphlet bearing on his new method. In it he goes into all the necessary details, and offers drawings of the instruments needed, of the localities at which the veins are to be divided and ligated, half tones of some patients operated upon with wonderful success, as to appearances, and radiographs before and after the operation, proving that the vein becomes normal in outline and that the varicosity has ceased. Space prevents us going into farther detail concerning this new method, but we shall be very glad to loan a copy of the pamphlet from Dr. Schiassi to any surgeon in Maine who wishes to try a better operation than any now available for varicose veins.

The Eligibility of Non-Proprietary Mixtures.

Physicians and publishers of journals who wish to adhere to the recommendations of the Council on Pharmacy and Chemistry are hereby reminded that non-proprietary mixtures are deemed by the Council as eligible for prescribing and advertising, without the necessity of being admitted to New and Non-official Remedies.

Strictly non-proprietary mixtures of official substances, etc., (for instance, morphin and atropin tablets) are generally sold without any special claims which would make them subject to investigation by the Council; while the number of these combinations listed by the various manufacturers is so great that even their mere enumeration in New and Non-official Remedies would be practically impossible. The intelligent physician is the best judge of the advisability of prescribing ready-made non-proprietary mixtures of this type. The danger is that he may not always be able to discriminate clearly, on the one hand, between these non-proprietary mixtures that are not listed in New and Non-official Remedies because their admission would be superfluous, and on the other hand, the proprietary mixtures which do not appear in New and Non-official Remedies because they have been refused admission. The appended definition of "proprietary mixtures" shows where the line is drawn by the Council.

PROPRIETARY MIXTURES. — A mixture will be considered as proprietary, and therefore requiring consideration by the Council and admission to the book or appendix, if it contains any proprietary article, if it is marketed under a name which is in any way protected or if its manufacturer claims for it any unusual therapeutic qualities.

All mixtures to which this definition applies are deemed proprietary and will be listed by name in New and Non-official Remedies, if they comply with the rules of the Council.

In all doubtful cases, the secretary of the Council will gladly supply specific information.

W. A. PUCKNER,

Secretary of the Council on Pharmacy and Chemistry,
535 North Dearborn Street, Chicago.

Medical Teaching.

In an excellent paper by Dr. MacKenzie in the British Medical Journal for January 7, 1914, concerning the teaching of bedside medicine, the writer mentions that as a student of medicine, he never was given a single chance in any hospital (and he doubts if any students fare any better nowadays) to see a single case of tuberculosis except in the final stages. He urges that instruction in tuberculosis ought most positively to include early examinations and the definition of incipient symptoms in modern medical teaching.

Medico-Legal.

Proposed Act for a Reformatory for Women.

STATE OF MAINE.

In the year of our Lord one thousand nine hundred and eleven.

An Act to establish a Reformatory for Women.

Be it enacted by the People of Maine as follows:—

Section 1. The State shall establish and maintain a reformatory in which all women over the age of sixteen years who have been convicted of crime in the courts of the State or of the United States, and who have been duly sentenced and removed thereto, shall be imprisoned and detained in accordance with the sentences or orders of said courts and the rules and regulations of said reformatory.

Section 2. The Governor shall, with the advice of the Council, appoint five persons, of whom at least two shall be women, all of whom shall be inhabitants of this State, to be trustees of such reformatory. The terms of office of such trustees shall be five years and they shall be so appointed that the term of one of them shall expire on the first Tuesday of February in each year. Any person appointed to fill a vacancy in the board of trustees shall hold office for the remainder of the term of the person whom he succeeds.

Section 3. Said board of trustees shall have the general superintendence, management and control of said reformatory, of the grounds and buildings, officers and employees thereof, of the inmates therein, and of all matters relating to the government, discipline, contracts and fiscal concerns thereof, and may make such rules and regulations as may seem to them necessary for carrying out the purposes of said institution. Such board of trustees shall constitute a board of parole and shall have the power to parole or discharge inmates as hereinafter provided.

Section 4. The board of trustees shall appoint from among its members a president, secretary and treasurer, who shall hold office for such length of time as such board may determine. They shall appoint a woman superintendent who shall hold office during the pleasure of the board, and shall fix the compensation of such superintendent and the compensation of all other officers and employees.

Section 5. The superintendent shall, subject to the direction and control of the board of trustees,

1st, Have the general supervision and control of the grounds and buildings of the Institution, the subordinate officers and employees

and inmates thereof, and all matters relating to their government and discipline;

2nd, Make such rules, regulations and orders, not inconsistent with law or the rules, regulations or directions of the board of trustees, as may seem to her proper or necessary for the government of such institution and its officers and employees, and for the employment, discipline and education of the inmates thereof;

3rd, Exercise such other powers and perform such other duties as the board of trustees may prescribe.

Such superintendent shall also have the power to appoint and remove all subordinate officers and employees.

Section 6. On or before the first day of October in each year, the trustees shall furnish a report to the Government and Council containing the history of the institution for the year, and a complete statement of all accounts, with all the funds, general and special, appropriated or belonging to said institution, with a detailed statement of disbursements.

Section 7. When a woman over the age of sixteen years is convicted before any court or trial justice having jurisdiction of the offense, of an offense punishable by imprisonment in the State prison not for life, or in the county jail, or in any house of correction, such court or justice may order her commitment to the reformatory for women, or sentence her to the punishment provided by law for the same offense. When a woman is sentenced to the reformatory for women, the court or trial justice imposing the sentence shall not prescribe the limit thereof, unless it be for a term of more than five years; but no woman committed to the reformatory upon a sentence without prescribed limit, as aforesaid, shall be held therein for more than five years if sentenced for a felony, nor for more than two years, if sentenced for a misdemeanor. If the sentence imposed upon any woman be for more than five years, she shall be so held for such longer term.

Section 8. The judge or magistrate committing a woman pursuant to this act, shall cause the superintendent of the reformatory to be immediately notified of such commitment, and shall cause a record to be kept of the name, age, birthplace, occupation, previous commitments, if any, and for what offense, the last place of residence of such woman, and the particulars of the offense for which she is committed. A copy of such record shall be transmitted with the warrant of commitment to the superintendent of such institution, who shall cause the facts stated therein and such other facts as may be directed by the board of trustees to be recorded in such form as the board of trustees shall determine.

Section 9. Such judge or magistrate shall, before committing any such woman, inquire into and determine the age of such woman at the time of her commitment, and her age as so determined, shall be stated in the mittimus. The statement of the age of such woman in such mittimus shall be conclusive evidence as to such age in any action to recover damages for her detention or imprisonment under such mittimus, and shall be presumptive evidence thereof in any other inquiry, action, or proceeding relating to such detention or imprisonment.

Section 10. If any woman committed to said reformatory is, at the time of her commitment, the mother of a nursing child in her care and under one year of age, or is pregnant with child which shall be born after such commitment, such woman may retain such child in said reformatory until it shall be two years of age, when it must be removed therefrom. The board of trustees may cause such child to be placed in any asylum for children in this State and pay for the care and maintenance of such child therein at a rate not to exceed two and one-half dollars a week, until the mother of such child shall have been discharged, or may commit such child to the care and custody of some relative or proper person willing to assume such care. If such woman, at the time of such commitment, shall be the mother of and have under her exclusive care, a child more than one year of age, which might otherwise be left without proper care or guardianship, the magistrate committing such woman shall cause such child to be committed to such asylum as may be provided by law for such purposes, or to the care and custody of some relative or proper person willing to assume such care.

Section 11. When it appears to the trustees that a woman who has been sentenced to the reformatory for women has reformed, they may issue to her a permit to be at liberty upon such conditions as they shall prescribe during the remainder of the term for which she might otherwise be held in said reformatory, and they may revoke said permit at any time before its expiration; but no such permit shall be issued to any woman who has been sentenced for more than five years. If a permit so issued to any woman be revoked, or if a woman escape from the reformatory, the board of trustees may cause her to be re-arrested and returned thereto for the unexpired portion of her term, dating from the time of her escape or the revocation of her permit. Any inmate ordered returned to the reformatory may, on the order of the superintendent or other officer of the institution, be arrested and returned to the reformatory, or to any officer or agent thereof, by any sheriff, constable, police officer, or other person, and may

also be arrested and returned by any officer or agent of the reformatory.

Section 12. The board of trustees shall determine the kind of employment for women committed to the reformatory and shall provide for their necessary custody and superintendence. The provisions for the safe keeping or employment of such women shall be made for the purpose of teaching such women a useful trade or profession, and improving their mental and moral condition.

Section 13. The Governor and Council shall select and purchase a suitable site for such reformatory, and the board of trustees, as soon as appointed and organized, shall proceed, as soon as practicable, to erect thereon and properly furnish and equip suitable buildings and structures to accomplish the object set forth in this act.

Section 14. For all bills contracted by the Governor and Council, as aforesaid, in purchasing a site, the Governor shall draw his warrant upon any money in the treasury not otherwise appropriated, to pay the same, and all bills contracted by the trustees in erecting, repairing and equipping suitable buildings and operating the institution, shall each year be audited by the Governor and Council, and the Governor shall draw his warrant upon any money in the treasury not otherwise appropriated, to pay the same.

Section 15. A sum of money not exceeding thirty-five thousand dollars shall be appropriated under this act to be used and expended for the purposes therein named, within the next two years.

Section 16. The trustees shall receive five dollars (\$5) per day when actually employed, and expenses.

Section 17. All acts and parts of acts inconsistent with this act are hereby repealed.

Traumatic Cataract.

A curious instance of traumatic cataract with permanent loss of vision from the sting of a bee penetrating the cornea is reported in a recent number of the *Klinische Monatsblätter für Augenheilkunde* for September.

Sympathetic Ophthalmia after Thirty-four Years.

From the *Archivio di Oftalmologia* of Barcelona, for June, 1913, we obtain the curious details of a case of sympathetic ophthalmia after the long space of thirty-four years, one of the longest on record. The original injury was from the prong of a fork. The eye when removed contained a concretion of phosphorus, magnesium-phosphate, organized tissue and blood pigment.

Propaganda for Reform.

Amorphous Phosphorus. — Amorphous or red phosphorus is chemically most inactive and pharmacologically is generally considered without action. Now Dr. I. L. Nascher proposes amorphous phosphorus as a remedy of remarkable value for arteriosclerosis of old age — but produces no reliable evidence for his claim. Based on Nascher's assertions Sharp and Dohme advertise pill phosphorus amorphous S. and D. as a successful method of treatment for senile arteriosclerosis. The asserted actions of amorphous phosphorus are such as may be calculated to appeal to the sexual neurasthenic and the advertisements are likely to bring about an extensive use of the drug by the uncritical. The psychic element which plays so large a part with the sexual neurasthenic will bring favorable reports on the drug — at least for a while — just as at one time ordinary phosphorus had a vogue. (Jour. A. M. A., March 7, 1914, p. 793.)

Red Phosphorus. — I. L. Nascher in a letter to the Journal states that he has had nothing to do with the exploitation of pill phosphorus amorphous S. and D. He admits that he has no experimental basis for the use of this remedy and that his theory is simply a theory without facts to prove it. (Jour. A. M. A., March 28, 1914, p. 1033.)

Towns' Epilepsy Treatment. — This nostrum, formerly sold as Towns' Epilepsy Cure, is a bromid mixture that is taken indiscriminately by the public in doses that no physicians would dare prescribe. The nostrum is given an editorial commendation in *The Western Christian Union*. (Jour. A. M. A., March 7, 1914, p. 794.)

The Absorption of Iron from Mineral Waters. — It is now generally admitted that both forms, organic and inorganic, of iron compounds can be absorbed and satisfactorily carry out the purposes for which they are ordinarily administered. Recent investigation has shown that iron salts are absorbed from natural waters (chalybeate waters) in which they occur and there is no reason for supposing that these cannot facilitate hemopoiesis and hemoglobin formation, if there is a deficiency in the iron-containing component of the blood, precisely as medicinally administered iron may. They seem to possess no advantage, however, over the latter. (Jour. A. M. A., March 14, 1914, p. 856.)

The Danger of Crotalin. — A death from infection from the use of crotalin is reported by J. F. Anderson of the U. S. Public Health Service. Out of 95 ampules of crotalin solution, from four different

manufacturers, 35 were found to be contaminated: further 12 tablets were examined and all found to be contaminated. It was demonstrated that there was a variation in the activity of different lots of crude venom and also in the solutions prepared by the same or different manufacturers. The report emphasizes the dangers of the use of rattlesnake venom or crotalin for the treatment of epilepsy. (Jour. A. M. A., March 21, 1914, p. 934.)

Thoxos. — Thoxos is offered to physicians by John Nyeth and Brother for the treatment of rheumatism, rheumatic arthritis, gout, etc., with the following incomplete statement of composition: "It is a palatable solution of Strontium and Lithium soluble salts, thirty-two grains, combined with twenty-four minims wine of colchicum seed and a vegetable alterative, in each fluidounce, flavored with aromatics." From an examination in the A. M. A. chemical laboratory, it was concluded that thoxos contains strontius salicylate, lithium salicylate, small quantities of sodium salicylate, free salicylic acid and potassium iodid, and probably also colchicum and sarsaparilla. As strontium and lithium salicylate are generally considered to have about the same action as sodium salicylate, thoxos may be considered as equivalent to a preparation containing in each dose of one teaspoonful, 3 grains of sodium salicylate with a fractional dose of colchicum and potassium iodid. (Jour. A. M. A., March 21, 1914, p. 949.)

Mercuric Chlorid and the Public. — In commenting on the use of mercuric chlorid tablets by the public and on the attempts to check this by special legislation, M. I. Wilbert points out that the exploitation of this drug under non-descriptive titles such as "antiseptic tablets" is partially responsible for their indiscriminate use. The fact that they are given a distinctive shape or color does not serve to protect the purchaser if he is uninstructed as to their contents; instead it tends to elaborate on the misuse of the tablets. Physicians are to some extent responsible for the public use of tablets of corrosive mercuric chlorid, for in the past, these tablets have been prescribed or given to patients for antiseptic purposes without sufficient precaution as to their poisonous character. (Jour. A. M. A., March 28, 1914, p. 1042.)

Dystocia from a Flexed and Everted Arm.

The British Medical for December 20, 1913, also mentions a curious instance of dystocia from a flexed and everted arm, which gave considerable trouble in delivering the child, but this was finally overcome by rotating, so as to bring the arm across the front of the body.

New and Non-official Remedies.

Since publication of *New and Non-official Remedies*, 1914, the following articles have been accepted for inclusion with "N. N. R." Those accepted during the current month are made prominent by the use of capitals.

H. M. Alexander & Co., TYPHOID VACCINE, IMMUNIZING.

B. B. Culture Laboratory, B. B. CULTURE.

Farbwerke Hoechst Co., Amphotropin.

Fairchild Bros. & Foster, Trypsin.

Hoffman-Laroche Chemical Works, THIOCOL, SYRUP THIOCOL, ROCHE.

Hynson, Wescott & Co., Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampoules, H. W. & Co.

Merck & Co., CEROLIN.

H. K. Mulford Co., Anti-Anthrax Serum, Mulford; Antistreptococcus Serum scarlatina, Mulford; Disinfectant Krelors, Mulford; Salicylos; Staphylo-Serobacterin; Strepto-Serobacterin Typho-Serobacterin.

E. R. Squibb & Sons, TETANUS ANTITOXIN, SQUIBB.

Thiocol and Syrup Thiocol, Roche, readmitted to N. N. R. The advertisements of Thiocol and Syrup Thiocol, Roche, to the public in the form of Sirolin having been abandoned here and abroad, the Council has readmitted Thiocol and Syrup Thiocol, Roche, to *New and Non-official Remedies* (see above).

Communication from the American Society for Physicians' Study Travels.

My Dear Editor: — The American Society for Physicians' Study Travels will make its first tour immediately after the close of the next meeting of the American Medical Association, starting from Atlantic City, June 26th. The complete itinerary can be obtained upon application to the Secretary, Dr. Albert Bernheim, 1225 Spruce Street, Philadelphia, and it will be found to promise an interesting, pleasant and profitable outing to all participants. The objects of the newly-formed organization are in the main to afford an opportunity to make the best use of one's vacation, time and money, in seeing cities and health resorts, and gaining practical knowledge of their institutions — medical, historical and municipal — as well as to attend clinics, demonstrations, lectures, illustrated with lantern slides, and public addresses.

In addition, however, many sight-seeing trips have been arranged for, and the path of the society lies by rail and water through a section of this country and Canada abounding in picturesque, sylvan and grand scenes, so that the tourist, whatever his individual taste, will enjoy the advantages of healthful recreation en route. It is believed that American physicians and their wives will appreciate the benefits of these tours, which have become so popular, both in Germany and France, where they are undertaken even more than once annually.

Early bookings, through the Secretary, are urged, in order that satisfactory accommodations can be secured for all who desire to participate.

Very truly yours,

ALFRED STENGEL, Per K.

Personal News and Notes.

Charles Martin Sleeper, M. D., of South Berwick, is a candidate for the nomination, on the Democratic ticket, for congressman from the first Maine District. Dr. Sleeper has practiced medicine in South Berwick during the past 31 years, since his graduation at the Bowdoin Medical School in 1883. He is well known in this section of the State, having been a prominent member of Maine's Legislature since 1909.

Dr. A. C. Maynard, who has been taking a post-graduate course of study in New York City, returned to his home in Biddeford the middle of April.

Dr. E. B. Silsby, after an illness of four weeks, is able to sit up a little while at a time.

Dr. W. F. Hart has recovered from his illness and has resumed his practice.

Dr. Henry J. Durgin of So. Eliot was elected Great Sachem of the Great Council of Maine, Improved Order of Red Men, at their meeting held in Red Men's Hall, Portland, Thursday, April 16th.

Dr. and Mrs. C. J. Emery of Biddeford have been visiting, during the past few weeks, their daughter, who resides in Chicago, Ill.

Dr. A. L. Jones of Old Orchard has been elected a member of the Democratic County Committee in York County.

Dr. H. A. Wentworth of Saco has been elected chairman of the York County Democratic committee.

Dr. Laura Black Stickney of Saco has purchased, recently, a residence on Cutts Ave., in that city.

Dr. Ansel S. Davis, who has been located in Maplewood for several years, moved to Springvale a few months ago.

County News.

CUMBERLAND.

The thirty-second regular stated meeting of the Cumberland County Medical Society was held Friday evening, April 10th, at the Congress Square Hotel, Portland. Over seventy physicians were in attendance.

The meeting was called to order by Dr. B. F. Dunn, the President, and routine business, including the election of three new members, was given attention. The new additions to membership were Dr. J. L. Maroon, of Portland; Dr. A. J. Lougee, of Fryeburg; and Dr. S. S. Mullin of Bartlett, N. H. All were unanimously elected through the medium of transfer from other county societies.

The following resolution was presented by Dr. J. A. Spalding of Portland, and was immediately adopted,—copies of same being duly sent to the representatives and senators from Maine.

Resolved, That the Cumberland County Medical Society, believing it to be for the best interests of the physicians of the United States, that the Library of the Surgeon General's office should remain intact, and that its proposed amalgamation with the Congressional Library would seemingly destroy its individuality as a National Medical Library, does hereby direct the secretary to inform the senators and representatives from Maine of our sentiments in the affair and to request them to use their power and influence against the proposed consolidation with any general library.

Following the business meeting, the paper of the evening was read by Dr. Ross McPherson, Attending Obstetrician to the New York Lying-in Hospital. The subject of the address was "The Convulsive Toxemias of Pregnancy, with Especial Consideration to their Treatment."

The subject was instructively and interestingly presented, to the end that a brisk discussion was taken part in, by some dozen or more of the members present. The Society gave a vote of thanks to Dr. McPherson for his efforts in our behalf.

Following the adjournment of the meeting, a buffet lunch was served, with a continuation of the entertainment so much enjoyed at the previous meeting.

DR. ADAM P. LEIGHTON, JR.,

Secretary.

PORTLAND MEDICAL CLUB.

The fourth meeting of the year was held at the Columbia Hotel on Thursday evening, April 2nd, 1914. No new business was transacted.

Dr. Twitchell reported a case of adhesions of labia majora in a woman aged 70, causing retention of urine in the vagina.

Dr. Burrage reported two cases of amœbic dysentery. Dr. Driscoll reported a case of malaria of the tertian type.

Dr. Gilbert reported a case of recurrent paralysis of the third cranial nerve, and Dr. Mitchell a case of tumor of the bladder.

The paper of the evening was by Dr. John W. Bowers, who talked very interestingly on his trip around the world. This paper held the undivided attention of the members for an hour and a half, and all were sorry when it came to a close.

ROLAND B. MOORE, *Secretary*.

KNOX.

The Knox County Medical Society held a meeting at the Hotel Thorndike, in Rockland, on the evening of April 14th. There was a good gathering as it was expected that Dr. Peters of Bangor would be present to address the meeting. On Dr. Peter's failure to arrive, Dr. H. E. Gribben gave a talk on "Conservation of Vision." The paper was discussed by Drs. Spear, Judkins, and Bartlett. At the close of the meeting, the application of Dr. Lester B. Bradford of Rockland and Dr. L. Louis Gammons of North Haven, were received and referred to the Board of Censors.

H. W. FROHOCK,
County Editor.

PENOBSCOT.

The April meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday evening, April 21st, Dr. Geo. E. Landry of Oldtown, presiding.

The paper of the evening was given by Dr. Hugh F. Quinn of Bangor, the subject being: "Milk Inspection."

Although the gathering was small in numbers, we had the pleasure of having present two of our oldest members, Dr. T. U. Coe of Bangor and Dr. E. N. Mayo of Orono. We were also surprised and pleased to have Dr. F. H. Gerrish of Portland walk in on us.

A very pleasant evening was passed, everybody having something to say on a topic so interesting to all.

It seemed to be the consensus of opinion that milk under present conditions is a very dirty fluid.

J. B. THOMPSON, *Secretary*.

YORK.

The 76th quarterly meeting of the York County Medical Society was held at the McClellan House, Kennebunk, Wednesday, April 2d, at 10.30 a. m. Dr. Jas. W. Gordon presided. The minutes of the January meeting were read and approved. One application for membership was received and referred to the Board of Censors. It was voted to endorse the resolution passed by the Cumberland County Medical Society, in disapproval of the removal from their offices of Dr. Henry W. Miller, formerly of Augusta, and Dr. S. C. Gordon of Portland.

Dr. J. A. Spalding of Portland gave a talk on the important subject, "Conservation of Vision," concerning which he has an intimate knowledge and valuable experience.

An excellent dinner was served at the McClellan House and then Dr. Addison S. Thayer, Portland, gave an address on "The Bowdoin Medical School." He reviewed the advances made in medical education during several years and clearly explained the present curriculum pursued in Maine's medical school, which is maintaining a high standard of efficiency, with a constant effort on the part of the members of the faculty to make conditions better as rapidly as possible. Dr. Thayer's presentation of the subject was such as to arouse keen interest in our medical school and to afford a better understanding of the services and its requirements.

There were in attendance graduates of about ten different medical schools and an interesting discussion ensued.

The weather was unfavorable and the roads were in bad condition, yet there was a good number present as follows:—Drs. J. A. Spalding, A. S. Thayer, Portland; F. M. Ross, F. C. Lord, Kennebunk; M. H. Ferguson, E. D. O'Neill, F. E. Small, C. F. Kendall, D. E. Doloff, C. F. Traynor, Biddeford; J. D. Cochrane, R. L. Maybury, Saco; J. W. Gordon, Ogunquit; C. E. Lander, Alfred; J. L. M. Willis, Eliot; F. W. Smith, E. C. Cook, York Village; A. S. Davis, L. W. Parady, Springvale; H. L. Prescott, Kennebunkport; D. W. Wentworth, Sanford; J. A. Randall, A. L. Jones, Old Orchard. Total 23.

A. L. JONES, *County Editor*.

Injuries from Golf Balls.

The bursting of a golf ball with resulting loss of vision was lately reported as occurring in New York. Thereupon a German Eye Journal observing the incident, comments on the occurrence in this fashion. "As New York is an importing port for Hamburg in Germany, great care should be exercised lest such balls be imported into Germany and produce similar injuries to the eyes." Four similar instances of accidents to the eye from the careless handling of golf balls have been reported during the current year.

MEMBERS OF THE MAINE MEDICAL ASSOCIATION*May 1, 1914****ANDROSCOGGIN.**

Barrell, D. A., New Auburn	Ness, William, Lewiston
Beckler, W. B., Auburn	Norton, C. E., Lewiston
Buker, E. B., Auburn	O'Connell, G. B., Lewiston
Bolster, W. W., Lewiston	Parker, R. A., Auburn
Call, E. V., Lewiston	Parmalee, W. W., Auburn
Cobb, A. A., Auburn	Peables, A. M., Auburn
Cummings, E. S., Lewiston	Peaslee, C. C., Auburn
Cunningham, C. H., Auburn	Philoon, C. E., Auburn
Cushman, B. G. W., Auburn	Pierce, E. F., Lewiston
Donovan, J. A., Lewiston	Plummer, A. W., Lisbon Falls
Dupras, J. E., Auburn	Russell, B. W., Lewiston
Emmons, G. P., Lewiston	Russell, E. W., Lewiston
Fahey, W. J., Lewiston	Sawyer, S. E., Lewiston
Fitz-Maurice, T. J., Lewiston	Scannell, J. W., Lewiston
Garcelon, A. M., Lewiston	Sleeper, F. E., Sabattus
Garcelon, H. W., Lewiston	Sleeper, H. S., Lewiston
Garcelon, W. S., Lewiston	Small, R. M., Auburn
Gerrish, L. P., Lisbon	Sprague, O. A., Turner
Gilbert, I. W., Litchfield	Stevens, H. E. E., Lewiston
Hanscom, O. E., Greene	Sturgis, B. F., Auburn
Haskell, W. L., Lewiston	Sturgis, John, Auburn
Hawkins, W. H., Lewiston	Wakefield, F. S., Lewiston
Hayden, L. B., Livermore Falls	Webber, W. E., Lewiston
Huggard, L. H., Lewiston	Williams, C. E., Auburn
Irish, H. L., Turner	Wiseman, R. J., Lewiston
McCarthy, H. T., Lewiston	

AROOSTOOK.

Bates, E. C., Houlton	Kincaid, R. J., Mars Hill
Bennett, F. E., Presque Isle	Larabee, F. F., Washburn
Bigelow, F. F., Island Falls	Libby, A. B., Smyrna Mills
Boone, S. W., Presque Isle	Mann, F. W., Houlton
Chamberlain, W. G., Ft. Fairfield	McNamara, W. F., Presque Isle
Damon, A. H., Limestone	Mitchell, F. W., Houlton
Dickison, T. L., Houlton	Porter, J. W. H., Caribou
Doble, E. H., Presque Isle	Potter, J. G., Houlton
Dobson, H. L., Ashland	Putman, H. L., Houlton
Ebbett, P. L. B., Hodgdon	Sawyer, A. D., Ft. Fairfield
Floid, A. E., Mapleton	Sawyer, A. L., Ft. Fairfield
Fraser, L. H., Westfield	Schneider, G. A., Island Falls
Fulton, A. J., Blaine	Sincock, W. E., Caribou
Gibson, W. B., Houlton	Tarbell, F. W., Smyrna Mills
Gilbert, P. E., Ashland	Thomas, C. F., Caribou
Gregory, F. L., Caribou	Thomas, C. F., Jr., Caribou
Hagerty, A. B., Ashland	Tracy, K. B., Mars Hill
Hammond, H. H., Van Buren	Upham, G. C., Caribou
Harmon, C. H., New Sweden	Upham, R. C., Ft. Kent
Hill, F. O., Monticello	Upton, G. W., Sherman
Huggard, L. H., Limestone	Walker, A. G., Houlton
Hunt, H. J., Island Falls	Ward, P. M., Houlton
Jackson, E. H., Bridgewater	White, W. W., Bridgewater
Jackson, F. H., Houlton	Wilkinson, H. E., Eagle Lake
Kalloch, H. F., Ft. Fairfield	Williams, C. E., Houlton
Kilburn, Frank, Presque Isle	

*This list of members consists of those reported as in good standing by the Secretaries of the County Societies at the June, 1913, meeting and corrected to May, 1914, with the exception of two or three counties.

CUMBERLAND.

- Abbott, E. G., Portland
 Allen, J. H., Portland
 Alward, Mark, Portland
 Andrews, E. T., Gray
 Baldwin, A. K., Portland
 Barret, Felix, Westbrook
 Bassford, S. J., Portland
 Bates, G. F., Yarmouth
 Bennett, J. L., Bridgton
 Bowers, J. W., Portland
 Bradford, W. H., Portland
 Bray, C. W., Portland
 Brock, H. H., Portland
 Brown, F. I., So. Portland
 Burr, C. R., Portland
 Burrage, T. J., Portland
 Buzzell, L. C., Standish
 Carmichael, F. E., Portland
 Caswell, C. O., Portland
 Clement, J. D., Portland
 Clough, D. J., Portland
 Conneen, T. F., Portland
 Connellan, J. W., Portland
 Cousins, W. L., Portland
 Cragin, C. L., Portland
 Cunston, C. M., Brunswick
 Davis, Gilman, Portland
 Davis, J. L., Portland
 Davis, P. W., Portland
 Berry, L. A., Portland
 Driscoll, Daniel, Portland
 Drummond, J. B., Portland
 Dunn, B. F., Portland
 Dyon, W. W., Portland
 Ellitt, G. M., Brunswick
 Elwell, W. E., Portland
 Emey, H. E., Portland
 Everett, H. J., Portland
 Ferron, F. L., Cumberland Mills
 Fickett, J. P., Naples
 Files, E. W., Portland
 Fisher, S. E., Portland
 Folsom, E. B., Portland
 Foster, B. B., Portland
 Foster, Benj. B., Portland
 Foster, C. W., Portland
 Gardner, F. H., Portland
 Geer, G. I., Portland
 Gehring, E. W., Portland
 Gerrish, T. H., Portland
 Gilbert, I. Y., Portland
 Gilson, A. S., Portland
 Gordon, S. C., Portland
 Gray, J. E., Portland
 Haney, O. E., Portland
 Hansen, N. C., Portland
 Harper, I. O., No. Gorham
 Haskell, A. W., Portland
 Hatch, Lucida B., Portland
 Hedin, C. J. West Pownal
 Hersom, Jas. L., Portland
 Hills, L. L., Westbrook
 Holt, E. E., Portland
 Holt, E. E., Jr., Portland
 Horr, J. L., Westbrook
 Hubbard, C. P., No. Windham
 Hunt, C. H., Portland
 Jordan, F. H., So. Portland
 King, Alfred, Portland
 Lamb, F. W., Portland
 Leighton, A. P., Jr., Portland
 Leighton, C. M., Portland
 Lewis, Harriet M., Portland
 Lewis, P. P., Gorham
 Lewis, W. J., Freeport
 Little, A. H., Portland
 Lombard, H. A., Bridgton
 Lombard, L. S., So. Portland
 Lougee, A. J., Fryeburg
 Maroon, J. L., Portland
 Marshall, N. M., Portland
 McAleney, J. L., Portland
 McDonough, E. J., Portland
 McVane, E. F., Portland
 Milliken, H. E., Portland
 Mitchell, Alfred, Brunswick
 Mitchell, Alfred, Jr., Portland
 Moore, R. B., Portland
 Moran, Wm., Portland
 Moulton, H. M., Cumberland Center
 Moulton, W. Bean, Portland
 Moulton, W. B., Portland
 Mullin, S. S., Bartlett, N. H.
 Nichols, Estes, Hebron
 O'Neill, J. B., Portland
 Palmer, C. A., Brunswick
 Parker, C. F., No. Windham
 Patterson, H. J., Portland
 Pingree, H. A., Portland
 Poor, L. H., Webbs Mills
 Pudor, G. A., Portland
 Redlon, C. H., Gorham
 Robinson, E. F., Falmouth
 Rogers, J. K. P., Knightville
 Sanborn, J. T., Portland
 Searle, F. W., Portland
 Small, R. D., Portland
 Smith, C. D., Portland
 Smith, F. M., Portland
 Smith, O. P., Portland
 Smith, T. P., Westbrook
 Sollima, E. L., Portland
 Somers, P. E., Portland
 Spalding, J. A., Portland
 Stetson, E. G. A., Brunswick
 Straw, O. W. R., Portland
 Sturdivant, G. L., Yarmouth
 Swasey, G. B., Portland
 Swift, H. M., Portland
 Sylvester, C. B., Harrison
 Thayer, Addison S., Portland
 Thayer, Augustus S., Portland
 Thombs, S. B., Portland
 Thompson, J. F., Portland

Thompson, P. P., Portland
 Thompson, W. S., Standish
 Tobie, W. E., Portland
 Turner, G. H., Portland
 Twitchell, H. F., Portland
 Vaughn, P. H. S., Yarmouthville
 Warren, S. P., Portland
 Webber, M. A., Portland
 Webber, M. C., Portland
 Webster, F. P., Portland

Welch, F. J., Portland
 Wescott, C. P., Portland
 Whitmore, Wm., Portland
 Whittier, F. N., Brunswick
 Williamson, W. D., Portland
 Witham, A. N., Cumberland Mills
 Witherle, C. B., Portland
 Wood, H. A., Portland
 Woodman, D. N., Yarmouthville

FRANKLIN.

Bell, C. W., Strong
 Blanchard, W. I., Pa.
 Brown, E. J., Stratton
 Colby, F. B., Rangeley
 Currier, E. B., Phillips
 Head, O. B., New Sharon
 Higgins, E. C., Phillips
 Hopkins, P. O., Bridgton
 Howard, A. G., Farmington
 Makepeace, B. F., Farmington

Nichols, J. W., Farmington
 Pennell, E. L., Auburn
 Perkins, J. W., Wilton
 Pratt, G. L., Farmington
 Pratt, H. S., Farmington
 Ross, A. M., Rangeley
 Trefethen, W. J., Wilton
 White, V. O., East Dixfield
 York, A. I., Wilton

HANCOCK.

Black, R. A., Sullivan
 Bragg, J. S., Winter Harbor
 Freeman, F. H., Surrey
 Gage, J. B., Atlantic
 Hagerthy, A. C., Ellsworth
 Hagerthy, G. A., Bar Harbor
 Higgins, R. G., Bar Harbor
 Hodgkins, Lewis, Ellsworth
 Holt, H. A., West Sullivan
 Hutchins, J. G., Stonington
 Littlefield, O. A., Blue Hill
 Morrison, C. C., Bar Harbor
 Morrison, E. J., Bar Harbor
 Neal, G. A., Southwest Harbor

Noyes, B. L., Stonington
 Ober, F. R., Northeast Harbor
 Patten, J. H., Bar Harbor
 Phillips, G. A., Bar Harbor
 Phillips, J. D., Southwest Harbor
 Smith, F. Fremont, Bar Harbor and
 Washington, D. C.
 Tapley, T. S., McKinley
 Underhill, C. S., Franklin
 Wakefield, R. W., Bar Harbor
 Wardwell, M. A., Penobscot
 Wasgatt, C. E., Deer Isle
 Webster, H. B., Castine
 Woodruff, H. L. D., Ellsworth

KENNEBEC COUNTY.

Abbott, C. W., Waterville
 Abbott, H. W., Waterville
 Badger, F. H., Winthrop
 Beach, S. J., Augusta
 Beane, C. H., Hallowell
 Berube, D. T., Augusta
 Boyer, E. W., Waterville
 Bunker, L. G., Waterville
 Campbell, G. R., Augusta
 Coombs, G. A., Augusta
 Cragin, D. B., Waterville
 Davies, O. C. S., Augusta
 Desjardins, A. W., Waterville
 Donnell, R. E., Gardiner
 Fish, E. P., Waterville
 Frederick, H. J., Augusta
 Goodrich, E. E., Waterville
 Goodrich, M. S., Waterville
 Hall, Herbert W., Augusta
 Hardy, T. E., Waterville
 Harris, W. H., Augusta

Hedin, C. J., West Pownal
 Hill, J. F., Waterville
 Horseman, H. L., Worcester, Mss.
 Hurd, B. F., Waterville
 Johnson, Wellington, Augusta
 Kagan, S. H., Augusta
 Ladouceur, I. W., Augusta
 Leach, C. H., So. China
 Libby, A. B., So. Gardiner
 Lincoln, C. J., Augusta
 Mabry, C. J., No. Vassalboro
 Mann, L. L., Augusta
 McKay, R. L., Augusta
 Merrill, P. S., Waterville
 Milliken, H. A., Hallowell
 Milliken, J. H., Readfield
 Newcomb, C. H., Clinton
 Nutting, J. D., Jr., Hallowell
 Odiorne, J. E., E. Pittston
 Parker, G. C., Winthrop
 Pitman, M. W. H., Bowdoinham

Poulin, J. E., Waterville
 Presson, Dorris M., Augusta
 Ridlon, B. D., Togus
 Sawyer, Alton, Gardiner
 Shaw, A. A., Clinton
 Simons, R. D., Gardiner
 Small, M. M., Waterville
 Stinson, H. K., Togus
 Strout, F. E., Gardiner
 Stubbs, R. H., Augusta

Sturgis, K. B., Augusta
 Sturtevant, A. H., Augusta
 Thayer, F. C., Waterville
 Totman, V. S., Oakland
 Towne, J. G., Waterville
 Vosburgh, S. E., Augusta
 Walker, F. D., No. Vassalboro
 Washburn, G. E., Augusta
 Witherall, C. H., Oakland
 Young, A. G., Augusta

KNOX.

Adams, F. B., Rockland
 Bartlett, F. O., Rockland
 Campbell, Fred., Warren
 Coombs, G. H., Waldoboro
 Foss, A. W., Rockland
 Frohock, H. W., So. Thomaston
 Gribben, H. E., Rockland
 Hadley, L. W., Union
 Hart, W. F., Camden
 Judkins, M. P., Rockland
 Kellar, B. H., Appleton
 Larrabee, F. W., Warren
 Laury, O. R., Vinal Haven

Lyford, W. F., Vinal Haven
 Nash, A. W., Jefferson
 North, C. B., Tenant's Harbor
 O'Connor, M. J., Rockland
 Sanborn, J. W., Waldoboro
 Silsby, E. B., Rockland
 Spear, W. M., Rockland
 Stetson, E. F., Damariscotta
 Steward, C. W., Rockport
 Walker, J. E., Thomaston
 Webster, F. H., Rockland
 Weidmann, S. Y., Rockport

OXFORD.

Andrews, S. L., Rumford
 Barker, F. N., Norway
 Bartlett, H. L., Norway
 Bicknell, R. W., Norway
 Binford, H. J., Mexico
 Bisbee, C. M., Rumford Falls
 Bradbury, B. F., Norway
 Farris, H. R., Oxford
 Fitch, H. F., Brownfield
 Gehring, J. G., Oxford
 Greene, J. A., Rumford
 Haskell, W. B., Oxford
 Heald, H. M., Buckfield
 Hutchins, G. H., Mechanic Falls
 Leslie, F. E., Andover
 Littlefield, J. G., So. Paris
 Marcou, L. B., Berlin, N. H.
 McCarty, E. M., Rumford Falls
 Morse, F. W., Canton

Nile, J. A., Rumford
 Noyes, H. Luella, Rumford
 Noyes, Laura F., Rumford
 Noyes, S. Evelyn, Rumford
 Pease, W. M., Dixfield
 Rankin, C. B., Mechanic Falls
 Rowe, W. T., Rumford
 Stanwood, A. L., Rumford Falls
 Stewart, D. M., So. Paris
 Stimpson, A. J., Waterford
 Sturtevant, J. S., Dixfield
 Tibbetts, R. R., Bethel
 Tobie, C. H., Mechanic Falls
 Trufant, L. H., Norway
 Wheeler, F. E., West Paris
 Wheel, F. E., Rumford
 Wight, E. A., Bolster's Mills
 Wight, I. H., Bethel

PENOBSCOT.

Bayard, C. H., Orono
 Brown, A. A., Bangor
 Brown, E. E., Bangor
 Bryant, B. L., Bangor
 Bryant, C. S., Millinocket
 Bunker, D. W., Bangor
 Burgess, C. H., Bangor
 Chapman, H. M., Bangor
 Clough, H. T., Bangor
 Coe, T. V., Bangor
 Crane, H. H., Bangor
 Edmunds, C. D., Bangor

Elkins, P. H., Oldtown
 Ellingwood, Wm., Winterport
 Emerson, O. R., Newport
 Farnham, E. J., Patten
 Fellows, W. E., Bangor
 Ford, L. H., East Eddington
 Freeman, F. H., Surrey
 Hall, L. F., Winn
 Hall, W. C., Orono
 Hammond, W. J., Enfield
 Hasty, W. L., Hampden
 Hennessy, Daniel, Bangor

Hills, F. L., Bangor
 Howes, L. M., Bangor
 Hunt, W. L., Bangor
 King, H. A., Bangor
 Landry, G. E., Oldtown
 Lethiecq, J. A., Brewer
 Madden, M. C., Oldtown
 Mansfield, Blanche M., Bangor
 Marsh, S. N., West Enfield
 Marquis, E. M. C., Oldtown
 Mason, L. S., Bangor
 Mason, W. C., Bangor
 McCann, Daniel, Bangor
 McCurdy, C. L., Bangor
 McDougal, W. E., E. Millinocket
 McNally, W. P., Bangor
 Milliken, H. J., Bangor
 Mitchell, R. L., Carmel
 Murphy, J. H., Dexter
 Murphy, T. J., Bangor
 Nason, C. J., Dixmont
 Nason, W. H., Hampden
 Nealey, E. T., Bangor
 Otis, S. W., Carmel
 Pastor, L. M., Bangor
 Peters, W. C., Bangor
 Philbrick, P. H., Bangor
 Quinn, H. F., Bangor

Redman, S. J., Exeter
 Richardson, H. K., Bradford
 Robinson, D. A., Bangor
 Rowe, A. W., Oldtown
 Russell, J. P., So. Brewer
 Sanger, E. B., Bangor
 Skolfield, E. B., East Corinth
 Simmons, W. H., Bangor
 Small, A. E., Bangor
 Smith, A. K. P., Corinna
 Snow, H. E., Bucksport
 Starrett, J. F., Bangor
 Thomas, C. M., Brewer
 Thomas, C. P., Brewer
 Thompson, H. E., Bangor
 Thompson, J. B., Bangor
 Tibbetts, G. B., Orrington
 Tomlinson, E. Edward, Orono
 Twitchell, A. W., Oldtown
 Tyson, F. C., Augusta
 Varney, J. R., Oldtown
 Walton, R. D., Frankfort
 Way, G. F., Jr., Lincoln
 Weld, G. G., Oldtown
 Weymouth, E. D., Charleston
 Whitney, W. E., Bangor
 Woodcock, G. M., Bangor
 Wright, L. G., Bangor, R. F. D. No. 8

PISCATAQUIS.

Brown, M. O., Dover
 Bumps, W. A., Dexter
 Crosby, N. H., Milo
 Dore, G. E., Guilford
 Flynt, E. D., Foxcroft
 Ford, L. C., Milo
 Hall, C. C., Dover
 Hall, C. C., Jr., Foxcroft
 Harden, D. D., Brownville Jct.
 Hathaway, W. R., Jr., Milo
 Hunt, Hiram, Greenville
 Marsh, R. H., Guilford
 McDonough, T. H., Brownville

McFayden, James, Milo
 Merrill, E. D., Foxcroft
 Potter, J. L., Guilford
 Pritham, F. J., Greenville Jct.
 Purington, W. A., Sangerville
 Ray, C. W., Sangerville
 Sampson, H. W., Monson
 Schriver, A. E., Milo
 Snow, H. A., Milo
 Stanhope, A. H., Dover
 Varney, F. L., Monson
 Wilson, J. H., Cambridge

SAGadahoc.

Barker, B. F., Bath
 Fox, Horace, Bath
 Fuller, E. W., Bath
 Gregory, G. A., Boothbay Harbor
 Hannigen, R. C., Bath
 Irish, I. C., Bowdoinham
 Leathers, Enoch, Wiscasset
 Lincoln, J. O., Bath

Marston, E. J., Bath
 Peabody, F. B., Richmond
 Peaslee, C. A., Bath
 Price, W. N., Richmond
 Snipe, L. T., Bath
 Stott, A. A., Bath
 Williams, A. F., Phippsburg

SOMERSET.

Greene, S. F., Solon
 Milliken, W. S., Madison
 Porter, E. A., Pittsfield
 Robinson, F. J., Fairfield
 Sawyer, W. G., Madison

Smith, H. W., Norridgewock
 Stinchfield, W. S., Skowhegan
 Taggart, H. C., Skowhegan
 Wing, E. M., No. Anson
 Wadsworth, J. E., Skowhegan

WALDO.

Cook, N. R., Brooks	Millett, Adelbert, Belfast
Fairchild, S. L., Searsport	Small, Elmer, Belfast
Hoit, C. B., Liberty	Stevens, E. L., Belfast
Johnson, S. W., Belfast	Vickery, O. S., Belfast
Kilgore, A. E., Brooks	Whitney, C. M., Unity
Kilgore, G. C., Belfast	Wilson, E. A., Belfast

WASHINGTON.

Barker, N. B. T., Woodland	Johnson, H. O., Machias
Bennett, E. H., Lubec	Johnston, S., Vanceboro
Best, H. H., Pembroke	Longfellow, J. W., Machias
Bunker, W. H., Calais	Maloney, D. A., Robbinston
Burritt, G. L., Harrington	Mason, H. B., Calais
Chandler, F. A., Addison	Miner, W. N., Calais
Curtis, A. K., Danforth	Murphey, J. L., Eastport
Cranston, E. A., Calais	Porter, M. L., Danforth
Dibblee, G. O., Moore's Mills, N. B.	Smith, A. L., Machias
Deinstadt, W. M., St. Stephen, N. B.	Smith, J. R. N., Milltown
Dyas, A. D., Eastport	Snell, F. W., Isle au Haut
Dyas, I. E., Calais	Sullivan, E. V., St. Stephen, N. B.
Gilbert, W. J., Calais	Tustin, Ruth, Eastport
Grady, Eliza, Eastport	Walling, J. A., Milbridge
Gray, W. E., Milltown, N. B.	Webber, S. E., Calais
Hambleton, M. P., W. Jonesport	White, E. A., Columbia Falls
Holland, R. A., Calais	Young, M. L., Oak Bay, N. B., Charlotte Co.
Johnson, C. E., Princeton	

YORK.

Abbott, P. H., Goodwin's Mills	Lightle, W. E., No. Berwick
Blagdon, C. W., Sanford	Lord, F. C., Kennebunk
Burnham, E. L., Sanford	Marshall, S. B., Alfred
Brown, L. H., No. Berwick	Maybury, R. L., Saco
Carpenter, L. W., Limerick	Maynard, A. C., Biddeford
Carty, J. D., Kittery Point	McCorrison, J. O., No. Berwick
Chenevert, J. O., Lawrence, Mass.	Moulton, B. M., Springvale
Cochrane, J. D., Saco	O'Neill, E. D., Biddeford
Cook, C. E., So. Berwick	O'Connor, J. M., Biddeford
Cook, E. C., York Village	Owen, H. A., Bar Mills, Me.
Davis, A. S., Springvale	Parady, L. W., Springvale
Davis, F. L., Biddeford	Phillips, F. E., Wells
Doloff, D. E., Biddeford	Pillsbury, C. W., Saco
Durgin, H. I., So. Eliot	Powell, L. L., Saco
Elliott, W. T., Berwick	Precourt, G. C., Biddeford
Emery, C. J., Biddeford	Prescott, H. L., Kennebunkport
Ferguson, M. H., Biddeford	Randall, J. A., Old Orchard
Girard, L. A., Biddeford	Ross, F. A., So. Berwick
Goodale, W. T., Saco	Ross, F. M., Kennebunk
Gordon, J. W., Ogunquit	Shannon, J. H., Saco
Gove, R. S., Sanford	Shapleigh, E. E., Kittery
Grant, H. H., Rochester, N. H.	Small, F. E., Biddeford
Haley, J. D., Saco	Smith, F. W., York Village
Hill, P. S., Biddeford	Smith, W. W., Ogunquit
Hill, S. C., Sanford	Stickney, Laura Black, Saco
Hobbs, F. H., So. Waterboro	Thompson, C. E., Saco
Hurd, H. W., Biddeford	Traynor, C. F., Biddeford
Jones, A. L., Old Orchard	Varrell, W. W., York Harbor
Illsley, H. P., Limington	Weymouth, H. A., Saco
Kelly, W. H., Sanford	Wentworth, B. F., Scarboro
Kendall, C. F., Biddeford	Wentworth, D. W., Sanford
Lander, C. E., Alfred	Willard, L. E., Saco
LaRochelle, J. R., Biddeford	Wiley, A. G., Bar Mills
L'Heureux, J. N., Sanford	Willis, J. L. M., Eliot
Lamoureux, Arthur, Sanford	

*Maine Medical Association

Program of the Portland Session, at the City Hall,

Wednesday and Thursday, June 10 and 11.

Clinics will be arranged for.

Wednesday

JUNE 10, MORNING SESSION, 9.00.

Conservation of Vision from the Point of View of Ophthalmia, Trachoma, Gonorrhoea and Syphilis.

H. T. Clough, Bangor.

Pneumonia.

E. C. Cook, York Village.

Pellagra.

H. L. Bartlett, Norway.

Surgical Diarrheas.

S. G. Gant, New York.

Abstract. First: I shall point out that Surgical Diarrhea occurs very much more frequently than is suspected. Second: I shall mention or briefly discuss the types and their causes of diarrhea which respond to surgical measures—often after other therapeutic measures have been tried and failed. Third: The operations suitable in this class of cases, some of which are original, will be discussed. Finally: I shall outline the post-operative treatment and indicate the complications and results which may be expected from the surgical treatment of diarrhea.

AFTERNOON SESSION, 2.00.

President's Address.

W. C. Peters, Bangor.

Salvarsan.

H. K. Tuttle, Tewksbury, Mass.

Abstract. A review of 300 cases of syphilis treated with mercury and the iodides; the length of time necessary for curing the lesions; the percentage of apparent cures and relapses; the expense to hospital and patient; the advantages and disadvantages of this method of treatment.

Citation of cases to show the resistance of the treponema pallida to this form of treatment.

A review of 230 cases treated with Old Salvarsan "606," and about 400 cases treated with neosalvarsan "914."

Indications and contra-indications.

Technique of administration.

Reactions following; bad results observed, and one fatal case of acute arsenical poisoning.

Treatment of serious poisoning following salvarsan and neosalvarsan.

Effect of the treatment on the lesions. Financial saving to the hospital and the patient.

Results in cases of papeasis, tabes dorsalis, pregnant women with syphilis, and the new-born.

Citation of cases to illustrate benefits of treatment.

Results of subsequent Wasserman tests.

Percentage of relapses.

Cases of reinfection.

Question of the reliability of the Wasserman test in certain lesions of tuberculosis.

Advantages and disadvantages of combining mercury and salvarsan.

Our present short-comings in the treatment of syphilis.

Sterilization of the Unit.

H. M. Swift, Portland.

Annual Oration, "Value of Social Service Work in Hospitals as a Part of Efficient Diagnosis and Treatment."

R. C. Cabot, Boston, Mass.

RECEPTION AND ANNUAL BANQUET

Will be held at Congress Square Hotel, at 7.30 P. M.

Dr. Woods Hutchinson of New York, and others will respond to toasts.

Toastmaster, W. C. Peters, Bangor.

Thursday

JUNE 11, MORNING SESSION, 9.00.

Surgical Kidney.

John Sturgis, Auburn.

Use and Misuse of Hexamethylenamine (Urotropin).

C. M. Robinson, Portland.

Abstract. History of hexamethylenamine. The elimination of the drug through various channels. The resulting claims for the drug in many diseases of bacterial and non-bacterial origin. Conditions necessary for the activity of the drug. Its toxicity. The importance to clinicians of the results of scientific investigation of the subject.

Heart Stimulation.

Charles Hunt, Portland.

AFTERNOON SESSION, 2.00.

Visceral Ptosis.

Richard F. Chase, Boston, Mass.

*Members who wish to offer voluntary papers or reports of cases are requested to communicate with F. Y. Gilbert, Portland.

Chap. X, Sec. 2. All papers read before the Association or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

The Cumberland County Committee are making arrangements similar to last year for the entertainment of the visiting ladies. Every effort is being made to surpass last year, and it is urgently requested that all members who will be accompanied by ladies will notify Dr. Joseph Drummond, 156 High St., at the earliest possible date, so that all necessary arrangements can be made.

Book Reviews.

Saunders' Question Compends. Essentials of Gynecology.

By Edwin B. Cragin, M. D. Revised by Frank S. Mathews, M. D. Eighth edition, thoroughly revised. Illustrated. Price, cloth, \$1.00 net. Philadelphia and London: W. B. Saunders Co., 1913.

Another edition, the eighth, of "The Essentials of Gynecology," has appeared, which would indicate that this little work, prepared by Dr. Edwin B. Cragin, of New York, surely occupies a useful niche in the medical book world.

It clearly describes and illustrates all the medical and surgical gynecological conditions in an epitomized form. For a ready guide and reference book it is unexcelled.

The illustrations are clear and many. Anatomy, pathology, diagnosis and treatment, especially surgical, are amply considered.

This book is of value to students and physicians, who wish a shortened treatise on present day gynecological ideas and teaching.

The cost of the book is \$1.00 and this money may profitably be expended by those interested in the subject of diseases of women.

A. P. L., JR.

Review of Current Literature.

(Journal Cutaneous Diseases and Syphilis, February, 1914.)

The Prevalence and some of the Consequences of Syphilis.

BY WILLIAM T. CORLETT, M. D., CLEVELAND.

Dr. Corlett believes that the prevalence of syphilis is little understood by the laity, and not sufficiently appreciated by the medical profession.

He cites that at the International Conference at Brussels in 1889, Le Noir stated that 15% of the inhabitants of Paris were syphilitic. Fournier's estimate gave 17%, and these estimates apply in general to the cities of other countries.

Of the cases admitted to a medical ward in a general hospital, where syphilis is supposed to be excluded, 32% were syphilitic. Another ward in the same medical service contained twenty-two patients of which twelve, or 52% were syphilitic. In the private practice of a physician devoting himself to the ear, nose and throat, of fifty consecutive cases, eight or 16% were syphilitic. In the State Insane Hospital at Cleveland, during the past year, 13% of all the patients admitted were suffering from general paralysis of the insane.

Of this number, 94% gave a positive Wasserman, and 60% gave a history of luetic infection. This does not include other involvements of the nervous system, which is known to be especially susceptible to this disease, in which insanity does not enter. In the London County Schools for the Deaf, Yearsley stated that 6% of the inmates bore the stigmata of congenital lues.

Dr. Corlett thinks that it may be conservatively estimated, that, of all patients admitted to hospitals in this country, at least 20% are victims of this disease and are admitted for some of its manifestations.

He calls attention to the fact that large numbers of syphilitics receive treatment from the drug stores, charlatons, etc., who after a very short treatment believe themselves cured. Of the number who attended the clinic at the Lakeside Hospital, one hundred and sixty-five, or 49% of the total number of syphilitics admitted during the year, received an average of 3.2 days' treatment, failing to return through ignorance, carelessness or shame.

In the department of skin diseases and syphilis at the Lakeside Hospital, the practice has been to render the patients inocuous to others at the earliest possible moment, which may be more readily accomplished by the patients receiving treatment at the appearance of the initial lesion.

In conclusion, Dr. Corlett believes that the inadequate methods so frequently observed in the treatment of syphilis, are due to: the position that syphilis occupies in the curriculum of medical schools; incompetent teaching; the prevalence of so many trade journals, subsidized by the manufacture of drug compounds and sent broadcast to every doctor whose address is obtainable; and the lack of exact knowledge on the part of the laity, who are the makers of the laws concerning medical subjects, making possible the various cults which spring up and thrive a time in the name of medicine.

B. F.

= = WANTED = =
OCULISTS' PRESCRIPTION WORK.

We offer the facilities of a large shop.
 Every order receives the personal attention of one of the firm.
 Only the best of material is used and we never substitute.
 The small orders are appreciated as well as the large.
 A trial will convince you of our accuracy and promptness.

THE SMITH-SOMES CO.

... OPTICIANS ...

578 Congress Street,

Opp. Congress Square Hotel

ANNUAL MEETING, PORTLAND, JUNE 10 & 11

THE JOURNAL OF THE Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

JUNE, 1914.

NO. II

REMARKS ON THE FEEDING OF INFANTS AND SOME DISEASES OF THE GASTROENTERIC TRACT IN INFANCY.*

BY JOHN LOVETT MORSE, A. M., M. D.,
Associate Professor of Pediatrics, Harvard Medical School.

It would seem hardly necessary to emphasize the importance of breast-feeding to an audience of physicians. My experience leads me to believe, nevertheless, that there are still many physicians who do not appreciate how much better human milk is for an infant than any form of artificial food. They would appreciate it better, I believe, if they realized that 85% of all infantile deaths occur in the bottle-fed and 90% of the deaths from the diarrheal diseases in those fed on artificial foods. I personally thoroughly believe that babies fed on the breast are not only less likely to die than are those fed on artificial foods, but also that in general they have a greater resistance and are better and stronger babies in every way. I am inclined to believe, although I cannot prove it, that they are also stronger and better during childhood and that in many instances this superiority lasts into adult life. Physicians are altogether too willing to advise the discontinuance of nursing on insufficient grounds. They do not realize how often a breast milk, which at first seems insufficient, will increase in amount or how frequently a breast milk, which does not agree in the beginning, will agree perfectly later. They do not seem to appreciate how

*A talk to the Penobscot County Medical Society, March 17, 1914.

much can be done by regulation of the mother's life and diet to increase the quantity and change the quality of the milk. Many physicians also seem to think that it is not right to feed a baby partly on the breast and partly on an artificial food. There is absolutely no justification for this belief. Even a little breast milk is of advantage. Babies digest an artificial food much better, if they have some breast milk. The baby should be given, therefore, whatever breast milk there is, and the deficiency made up with an artificial food.

The best substitute for human milk is some modification of cow's milk. The composition of the milk of some other animals is nearer that of human milk than is that of the cow. None of them are, however, sufficiently like human milk to be given to the average normal baby without some modification. Since all milks have to be modified, it is much preferable to use cow's milk, which can be easily obtained everywhere and in sufficient quantities. Other milks are hard to get and, when obtainable, the supply is insufficient.

In my opinion, it is not necessary to use proprietary or patent foods in the feeding of infants. There are only certain food elements. These are fat, sugar, starch, protein, mineral matters and water. The proprietary foods can contain nothing but these elements. Any or all of these elements can be embodied in modified milk. Proprietary foods are made on a large scale to fit certain general indications and not to fit the needs of the individual baby. They are, in general, used by physicians most unintelligently. They are unduly expensive. The purchaser must, of course, pay not only for their food value, but also for the expenses of agents and advertising as well as a profit to the makers.

There is no doubt that the proprietary foods agree in many instances in which modified milk has not agreed. The explanation of this fact is, in most instances, easy. The proprietary foods can be divided into three main classes: the condensed milks, the foods containing various combinations of dextrin and maltose, and those containing sugar and starch. When the condensed milk foods agree, it will usually be found that they have been given in a very dilute form. Most physicians would not dare to give so dilute a mixture of cow's milk, as they would be afraid of starving the baby. It will always be found that, if as dilute a mixture of cow's milk is given as of condensed milk, it will agree as well, or better. When the foods which are composed chiefly of dextrin and maltose are given in conditions in which the difficulty is the fermentation of milk sugar, they will naturally relieve it. When they are given mixed with milk, they amount simply to a modified milk with dextrin and maltose and will agree and disagree under exactly the same circumstances as will mod-

ified milk to which dextrin and maltose have been added instead of milk sugar. When the proprietary foods consisting largely of sugar and starch are mixed with water, the mixture amounts simply to a starch water to which sugar has been added. They will agree and disagree in the same way and under the same conditions as will sugar and starch. When they are mixed with milk, the mixture amounts to a modified milk prepared with milk sugar and a cereal diluent. The starch in the proprietary food will have the same action as will any other starch, that is, it will by its colloidal action hinder the formation of large casein curds. Foods like imperial grannum, which consists entirely of starch, have, of course, the same action.

It is not as necessary to emphasize the importance of clean milk in the country as it is in the city, because, even when milk is obtained under dirty conditions in the country, it is consumed so quickly that there is not the opportunity for bacterial growth and serious changes in the milk that there is when milk is transported long distances to the city. It is easier, however, as a matter of fact, to get an ideal milk in the large cities than it is in the country. It must always be remembered, however, that it is impossible to make a proper food for a baby from dirty milk, no matter how much it is modified or how much effort is made to fit it to the needs of the individual baby. A point to be remembered in connection with the milk is that the milk will often disturb babies when the cows have been eating green apples and green corn. The only explanation which can be found for many disturbances of the digestion in babies in the late summer and early autumn is the feeding of too much green fodder to the cows. Freezing milk also causes changes in the emulsion of the fat, which may disturb the digestion of babies.

There seems to be considerable misapprehension as to what is meant by modified milk. Modified milk does not mean any special form of milk or any special method of feeding. The term is applied to any food of which milk in any form is the basis, no matter whether it is a simple dilution of whole milk with water or a mixture with whey, cereal waters, sugars, or what not.

In preparing modified milk, it must be remembered, as already stated, that there are only certain food elements. Foods can contain nothing but these elements, although it is not necessary that a single food contain them all. The proportions of the different elements can be varied indefinitely. In thinking of the composition of infants' foods, we should never think in quantities of cream, milk, barley water and so on, but in percentages of fat, sugar, starch and protein. It is impossible to feed accurately and to know exactly what is being done unless the proportions of the different elements are calculated

in percentages. Thinking and calculating in percentages does not, however, mean any special form or method of feeding. It is simply a method of calculation to obtain accuracy in prescribing, it being just as necessary to prescribe a baby's food accurately as it is to prescribe a medicine accurately.

In prescribing the food for a baby the first time that it is seen, there are often no definite indications as to what food to give it. Under these conditions, the natural thing to do will be to start the baby on a food which experience has shown to be suitable for the average baby of that age and weight. It is for this reason that there are tables in most text-books, giving the percentages and amounts for different ages. These tables are merely averages and serve simply as a guide in beginning to feed. The expert will rarely refer to these tables, because he will find indications as to what food to give which the average man will overlook and because he knows instinctively from his own experience what is likely to be suitable. Such tables are, however, necessary for the novice. After the first food, the composition of the other foods should be regulated according to the symptoms in the given case. The food should be varied according to whether the baby is gaining or not, according to whether he has flatulence and colic, according to whether he vomits or not and according to the composition of the stools.

No one who understands infant feeding has any idea at present of imitating human milk in preparing modified milk. The more he knows about infant feeding, the more positive he is that it is not now, and never will be, possible to make human milk from cow's milk. Nature has shown us, however, in the composition of human milk, that the infant is intended to take a dilute food containing a relatively high percentage of fat, a still higher percentage of sugar and a relatively low percentage of protein. Experience has shown us that the average well baby does best on foods in which the proportions of the different elements have somewhat this relationship to each other. Experience has also shown us that this relationship cannot be followed in any way when babies are sick.

Nature provides a food of nearly constant composition throughout the whole of the period of lactation. What little change there is, is a diminution in the strength. Experience has shown us again, however, that it is impracticable to follow nature in this respect. A young baby cannot take as strong a food as an older one. It is always necessary to begin with a very weak food and then to increase the strength to meet the needs of the individual baby.

The first formula which is given is always, of necessity, more or less of an experiment. After this, the food should be changed to fit

the indications in the special case. In making the changes each element should first be considered separately and then in relation to the other elements.

Fat is of great importance to the infant, because of its high caloric value. It serves as a source of energy, but not as a tissue builder. An excess of fat is more likely to disturb the digestion than is an excess of any other element. A disturbance of the digestion due to fat is, moreover, harder to correct than one due to any other of the food elements. The percentage of fat in the food can be varied, but the composition of the fat cannot be varied except in so far as the breed of cow from which the milk comes can be changed. There is no doubt that the fat in the milk of Holstein and Ayrshire cows is more easily digested than that in the milk of Jerseys and Guernseys.

Sugars and starches also serve as sources of energy and not as tissue builders. Their metabolic value is, however, not quite as great as that of fat, because of the larger amount of metabolic water which is furnished by the fat. Milk sugar is the one most suitable for well babies. It is better fitted to maintain the normal intestinal flora than are the other sugars. It is more laxative than the other sugars, and sometimes, when given in excess, causes serious disturbance of the digestion. When a baby is emaciated and starving and needs an immediately available supply of energy, the dextrin-maltose preparations are preferable to milk sugar. The dextrin-maltose preparations break up into dextrose and dextrose and are quickly absorbed. The dextrose can be immediately utilized, because it does not have to be transformed into glycogen in the liver and then re-transformed before it can be used. Milk sugar breaks up into dextrose and galactose. The galactose has to be changed into glycogen and then re-transformed before it can be used. Only one-half of the energy value of milk sugar is thus immediately available. In disturbances of the digestion due to milk sugar, the dextrin-maltose preparations are often most useful. They are more quickly broken up and absorbed and therefore do not keep up the excessively acid reaction of the intestines so long as does milk sugar. The type of fermentation which they favor is, moreover, somewhat different. There is nothing to recommend the use of cane sugar in infant feeding, except its lower price. It is not as good as milk sugar, when it is indicated, or as the dextrin-maltose preparations, when they are indicated. A strong, vigorous baby can, however, usually take and utilize any of these sugars indiscriminately.

It used to be said that starch should not be added to an infant's food because there was no starch in human milk and because the power of starch digestion was not present in the young infant. We now know, however, that the power of starch digestion is present and active at

birth, even in the prematurely born. It is amply sufficient to meet any reasonable demand. In answer to the criticism that there is no starch in human milk, it may be stated that cow's milk is not human milk and, therefore, that starch should be added. However this may be, there is no doubt that many babies do well on mixtures containing starch. The main reason that they do so is probably because the starch, by its colloidal action, prevents the formation of large casein curds. It is rarely given for its food value, although it has the same caloric value as sugar.

Protein is the one element from which new tissues can be formed and old tissues replaced. It is absolutely necessary to the maintenance of life. Neither fat nor carbohydrates can take its place. It may also be utilized as a source of energy, but this is a rather wasteful process.

It was formerly supposed that most of the disturbances of digestion in babies fed on cow's milk were caused by the protein. It is now known that protein is much less often at fault than we once thought. In fact, protein probably causes disturbance less often than the other elements. It is only fair to state, however, that the disturbances caused by protein are harder to recognize than those caused by fat and sugar and it is probable, therefore, that they are often overlooked or misinterpreted. An excess of protein undoubtedly throws an excessive amount of work on the organs of excretion and very likely makes the machine run at a higher rate of speed than is either necessary or advisable. Clinically the disturbances of the digestion due to the protein in the food seem to be connected with the formation of large, hard, casein curds in the stomach. Large amounts of protein can often be taken when the formation of these curds is prevented.

The salts in the food are unquestionably of great importance in infant feeding. Unfortunately, we know very little about them, and what we do know about them is not applicable in every-day work.

It used to be stated that alkalies, such as lime water and bicarbonate of soda, should be added to cow's milk mixtures to make them alkaline like human milk, it being believed at that time that human milk was alkaline and cow's milk acid. We now know that this belief was incorrect, and that both are really amphoteric. It is not necessary, therefore, to add alkalies to cow's milk mixtures as a routine measure. The chief action of alkalies is to delay the action of rennin on the casein, rennin acting only in an acid medium. This allows the escape of more or less of the liquid milk through the pylorus, and thus diminishes the work of the stomach, throwing it on the intestine. Alkalies are indicated, therefore, in a general way, when there is vomiting, but not otherwise.

Recent studies go to show that the pasteurization of milk does not interfere with its digestibility or predispose to the development of the diseases of nutrition. The experiments of Brennemann as well as clinical experience show conclusively that the boiling of milk makes it more digestible. The boiling of milk does, however, cause certain chemical changes in the milk which theoretically might predispose to the development of the diseases of nutrition. Personally, while theoretically convinced that the pasteurization and boiling of milk produce no ill effects on the nutrition, my practical experience still makes me feel that, when possible, I prefer to feed babies continuously on raw milk rather than on either pasteurized or boiled milk.

It is important, when babies are not thriving on their food, to calculate the caloric value of the food in order to determine accurately how much food value they are getting. The real food value of the food cannot be determined in any other way. It is foolish, of course, to suppose that every baby of a given age needs so many calories per unit of weight in order to thrive. Experience shows that some babies need far more calories than do others. Experience also shows, however, that there is a certain minimum below which babies seldom thrive and that if they go above a certain maximum they are almost certain to be upset. The average caloric needs of babies are between 100 and 120 calories per kilo. They usually can hold their weight on 75 calories per kilo. It must always be remembered, however, that while the gross caloric value of a food may be high, its net value may be low, because of the excessive amount of energy required to utilize it. In fact, it is possible to feed an animal in such a way that it will die sooner of starvation than it will if it receives no food at all. The calculation of the caloric value of a food simply serves, therefore, as a guide as to what is being done. It cannot serve as a basis for feeding.

It is also of importance to determine how much protein the food contains, because of the fact that protein is absolutely necessary for the formation of new or the replacement of old tissues. No other element can take its place. Unless the protein is sufficient, the baby will gradually fail and eventually die. The average baby needs between $1\frac{1}{2}$ and 2 grams of protein per kilo of body weight daily.

Disturbances of the digestion are very common in infancy. They may be due to overfeeding, as a whole, or to overfeeding with one or more of the various food elements. Indigestion may be associated with bacterial fermentation. Finally, bacteria may be the primary cause of inflammation of the intestine.

The symptoms of overfeeding, as a whole, are loss of appetite, vomiting, flatulence and colic, and an increased number of stools. These stools usually show evidences of a disturbance of the digestion

of one or more of the food elements. The disturbance of the nutrition is usually not marked when the baby is on the breast, but soon becomes marked when the baby is on an artificial food. It is usually not difficult to determine what is the matter, if the conditions are carefully studied. The treatment is relatively simple. When the baby is on the breast, the duration of each nursing must be shortened and the intervals between the nursings lengthened. The amount and strength of the food must be cut down, when the baby is on an artificial food.

An excess of fat is more often the cause of disturbance of the digestion than an excess of any of the other food elements. The symptoms of an excessive amount of fat are loss of appetite, vomiting, flatulence and colic and abnormal stools. The vomitus often has the odor of butyric and other fatty acids. The stools vary in their characteristics. They often contain small, soft curds. They sometimes have an oily appearance. In other cases they are loose and very irritating to the skin, while in others they are hard, light-colored, dry and crumbly. When they are hard and dry, the fat is combined with calcium and magnesium in the form of soap, and the body is then robbed of these salts. When the stools are loose and irritating, the fat is in combination with sodium and potassium and the body is thus robbed of these elements. When the diarrhea is excessive, the loss of salts may result in very serious disturbance of the nutrition. When there is a long-continued excess of fat in the food, with a consequent loss of salts, an acidosis may develop. The disturbances of metabolism caused by an excess of fat are often extreme and are presumably the cause of the condition often spoken of as marasmus or infantile atrophy.

When the disturbance of the digestion is due to an excessive amount of fat, the treatment consists, of course, in cutting down the amount of fat. The fat should always be cut down lower than seems necessary, because the tolerance is almost always less than it seems to be. The amount of fat can only be raised very slowly, because it takes a long time to re-establish the tolerance.

When there is an excessive amount of milk sugar in the food, there is vomiting, flatulence and colic, and an increased number of loose, green, acid, irritating stools. The vomitus usually has the odor of lactic and similar acids. The treatment consists in cutting out the milk sugar which is being added to the food, and then gradually replacing it by one of the dextrin-maltose preparations. Marked disturbances of the digestion as the result of an excessive amount of starch in the food, while evidently very common abroad, are relatively unusual in this country. An excessive amount of starch in the food

causes symptoms in general similar to an excessive amount of sugar in the food. The symptoms are, however, usually much less marked. Sometimes the stools in starch indigestion are hard, brown and brittle.

An excessive amount of protein in the food causes vomiting, flatulence and colic and abnormal stools. Eventually there is disturbance of the nutrition. The vomitus often contains large, casein curds. The odor of the vomitus is not characteristic. The most common manifestation of a disturbance of the digestion of protein is the presence of large, hard curds in the stools. The stools are, however, sometimes loose and brownish, with a foul or musty odor.

The treatment of disturbances of the digestion caused by the protein in the food consists either in diminishing the amount of protein in the food or in preventing the formation of large casein curds. If the amount of protein is cut down, great care must be taken not to diminish it so much that the protein need of the body is not covered. There are many ways of preventing or hindering the formation of large casein curds. One of these is by giving a part of the protein in the form of whey, whey protein not being acted on by rennin. Another method is by the addition of cereal dilutents, the starch of which acts as a protective colloid and thus prevents the formation of large curds. Still another method is the "peptonization" (really pancreatization) of the milk, which partially digests the casein and changes it into a form not acted on by rennin. The addition of citrate of soda also prevents the formation of large casein curds. A chemical reaction takes place by which the calcium caseinate of milk is changed to calcium-sodium caseinate. This double salt is not curdled by rennin. The action of alkalies in delaying the coagulation of the casein by rennin and thus allowing more or less of the liquid milk to leave the stomach has already been mentioned. Boiling the milk also prevents the formation of large casein curds.

The disturbances of digestion and metabolism caused by either an excessive or an insufficient amount of salts in the food are unquestionably of great importance. They are, in general, however, at present very difficult of recognition. When they result, as they often do, in the production of rickets, scurvy and the spasmophilic diathesis, they are quite evident.

Any of these chemical disturbances of digestion may be accompanied by a secondary fermentation of the imperfectly digested intestinal contents by bacteria. When this happens, it is presumable that there are superficial lesions of the intestinal wall and that more toxic products are absorbed. The symptoms are usually exaggerated. The number of stools is increased, the abnormal characteristics of the stools are exaggerated, and there is likely to be more mucus in them.

There is more likely to be a rise in the temperature and the disturbance of nutrition is likely to be greater. It is very difficult in many cases, however, to draw any definite line between where simple indigestion ceases and indigestion with fermentation begins.

Infectious diarrhea or, as it is often called, dysentery or ileocolitis, is due to the direct action of bacteria, which not only thrive in the intestinal contents, but also cause definite pathological lesions of the intestinal wall. They, in many instances, also, probably pass into the blood-stream and form toxic products there as well. Infectious diarrhea may be produced by a variety of organisms, namely, the dysentery bacillus in its various forms, the gas bacillus and allied organisms, and by a number of other organisms, such as the colon bacillus and the streptococcus.

The symptoms caused by these various organisms are essentially the same. They are, in fact, so much alike, that it is impossible to determine from them which organism is causing the disturbance. There is usually continued, but not very high, fever. There is rarely vomiting. The abdomen is usually sunken. There is a large number of small stools, consisting almost entirely of mucus and blood. There is tenesmus before, during and after the passage of the stools. The stools sometimes contain pus and membrane. The odor varies from one resembling that of wet hay to a very foul or gangrenous one.

The treatment of infectious diarrhea depends entirely on the organism which is causing the disease. The dysentery bacillus, colon bacillus and streptococci are organisms which grow in both protein and carbohydrate media. When they grow in protein media, they form toxic substances. When they grow in carbohydrate media they form innocuous substances. When they are in a medium which contains both protein and carbohydrates, they grow by preference on the carbohydrate portion. It is evident, therefore, that if a food is given which contains a large amount of protein and little or no carbohydrate, the most favorable conditions for the bacteria to produce toxic substances are provided. Such foods are albumen water, broth, beef juice and skimmed milk. Starvation has the same effect, because the secretions of the intestine are protein in character. It is evident, therefore, that when infectious diarrhea is caused by any one of these organisms, the food should consist of carbohydrates. The best carbohydrate is milk sugar. It is preferable to the other sugars, because it is more slowly broken up in the intestine and, therefore, more slowly absorbed. The carbohydrate media is, therefore, present longer in the intestine than is the case when the other sugars are given. It is well to combine it with starch, in order to get the continued carbohydrate action far down in the bowel. These babies should be started

with a cereal water containing from 0.75 per cent to 1.50 per cent. of starch and six or seven per cent of milk sugar. In the severest cases it may be well to give a solution of pure dextrose, either subcutaneously or intravenously, in order to inhibit the growth of the organisms which may have invaded the circulation.

The gas bacillus and allied organisms thrive on carbohydrate media, but not on protein. The indication, therefore, when the disease is due to organisms of this type, is to feed the baby on protein foods and to reduce the carbohydrates to a minimum. Lactic-acid-forming organisms are also antagonistic to the growth of the gas bacillus and allied organisms. Another method of treatment, therefore, is to give unheated buttermilk, or modified milk ripened with lactic acid bacteria. Both of these methods of feeding are often successful.

Unfortunately, as already stated, it is impossible to determine from the symptoms which type of organism is causing the disturbance. Equally unfortunate is the fact that the treatment which will relieve one case will make the other worse. The determination of the organism which is causing the trouble is also unfortunately too complicated a procedure for every-day clinical work. There is, however, a simple test for the gas bacillus, with whole milk, which is fairly accurate and satisfactory. This gives results in about twelve hours. Too much reliance cannot, however, be placed upon this test. The fact which is of the most practical assistance in determining how to treat these cases is that, in a given season, most of the cases are due to the same organism; that is to say, one summer most of the cases will be caused by the dysentery bacillus, the next summer by the gas bacillus, the next summer by streptococci, and so on. After treatment has been tried on a few cases in a given season, it is possible to know, therefore, what organism is probably at fault and which line of treatment is more likely to be useful. When there is no such guide, the only thing to do is to start on one line of treatment. If the patient improves, it is evident that this is the right line. If the patient becomes worse, it is evident that it is the wrong line and that the other line must be substituted. This method may not be extremely scientific, but it is the only practicable one at present for the every-day practitioner.

It is evident, of course, that only the high places have been touched in these remarks. Much has been left unsaid which might well have been said, and much of that which has been said has been said very imperfectly and, at times, not absolutely correctly.

***STATE CARE AND TRAINING OF THE FEEBLE-MINDED IN MAINE.**

BY CARL J. HEDIN, M. D., SUPERINTENDENT MAINE SCHOOL FOR
FEEBLE-MINDED, WEST POWNAL, MAINE.

Mr. President and Members of Portland Medical Club:

In acknowledging my appreciation of your invitation to address you this evening, I wish to thank you for the honor, and I sincerely hope that in presenting my subject I may be able to further stimulate your interest in the care of the feeble-minded in such a way that, although you are all busy in your profession, you will give this class of people fresh thought and consideration in the future.

In discussing the subject of State care and training of the feeble-minded in Maine, I shall attempt to consider briefly first, the history of the work; second, the work being done at present; and third, the future problem and its magnitude.

THE HISTORY OF THE WORK.

The problem of State care and training of the feeble-minded in Maine is of comparatively recent origin. Although the insane were provided for with State care nearly three-quarters of a century ago, no such provision was made for the feeble-minded in this State until within the last decade. This lack or failure of earlier provision for the proper care of the feeble-minded, was probably due to indifference of the medical profession, as well as to public unconsciousness of the wide-spread prevalence of feeble-mindedness,

It was not until the year 1907 that the need of State care and training of the feeble-minded in Maine became so urgent that the legislature passed an Act which provided for the care and education of this unfortunate class of people. A sum of sixty thousand dollars was appropriated the same year for the purpose of purchasing a site and establishing an institution for the feeble-minded. Nearly twelve hundred acres of land were secured at the junction of the towns of New Gloucester, Gray, North Yarmouth, and Pownal; and in the Fall of 1908 the Maine School for Feeble-Minded was established.

As no new buildings had been erected, only a few feeble-minded boys were admitted that Fall, who were housed in old farm houses which had been repaired. The construction of a new frame building to accommodate fifty boys was at once begun. This building was completed in February, 1909. In 1910, another frame building for fifty more boys was added, and in 1911, two brick buildings for girls were opened. The capacity of the Institution at the present time is

*Read before the Portland Medical Club, May 7, 1914.

258, and as soon as a permanent water supply is installed we can open another renovated farm house, which will accommodate eighteen more children, making the total capacity 276.

Before I leave the history of State care for the feeble-minded in Maine, permit me to recall to your attention the much debated question of whether or not, the present location of the Maine School for Feeble-Minded should be changed. From my own knowledge of the needs of an institution of this kind, and my personal experience with this institution, I firmly believe that the present location is very admirably adapted to the needs of an institution of this character. The School is located out in the country away from the city, which gives the children the benefit of an abundant supply of fresh air and sunshine, so essential for the improvement and development of children afflicted with physical and mental defects. The distance from the city saves our inmates from many curiosity seekers who would distract the children's feeble attention in their effort of learning. The feeble-minded are also better adapted for simple country life than any other kind of environment. Out on the farm they enjoy much freedom, are happy, and can be trained to follow simple but useful occupations.

The only objection to the present location of the Institution, I believe, is the lack of an adequate water supply. This, however, can be remedied, and I expect that a permanent water supply will be installed within a few months.

THE WORK AT THE SCHOOL.

The care and training of the feeble-minded as now carried on in this State is the special subject of my paper. As vacancies in the School occur, we select for admission the most urgent cases among the hundreds of feeble-minded persons for whom applications for admission have been received. These cases are then committed to our institution by much the same procedure as the insane are committed to our State hospitals.

After admission, our inmates are given a physical and mental examination, and classified according to age, physical and mental condition. All teachable boys and girls under sixteen years of age, and in certain cases under twenty, are then grouped in classes according to their mental age and given instruction adapted to their mentality. The higher grades are able to learn to read, write and do simple arithmetic. In the manual training and industrial rooms, they learn to work at various occupations. The boys learn to do cobbling, carpentry, painting, cane-seating, weaving, basketry, etc. The girls learn to do knitting, sewing, rug making, embroidery, weaving, lace making, and crocheting.

As already stated, only the higher grades in mentality of the feeble-minded are capable of learning from literary instruction, but all, except the very lowest or the idiots, are improved by manual and industrial training. The feeble-minded, on account of their intellectual deficiency, are not able to comprehend and remember abstract things; they must be taught by simpler and more practical methods. It is for this reason that manual and industrial training are more beneficial and of more importance in their education. Here the pupils are taught by object lessons, by associating certain physical properties with objects before them, and thus learn by concrete lessons.

This simple and practical training of the feeble-minded, not only is the best means by which to develop their mental capacities, but is the only method by which they can be made useful to themselves and partly or wholly self-supporting. The farm furnishes our large boys with simple and useful work. They have cut the bushes off from many acres of land, cleared fields of stones, dug trenches, and helped to build roads. They do much of the weeding and hoeing in the garden. In the winter the boys cut up the fire-wood for our farm colonies, and two of them drive ox teams. Some of the boys also learn to do house-work and bed making.

Our many household duties furnish our girls with equally simple and useful occupations. They are taught to wash dishes, sweep, dust, make beds, etc. They do much of the sewing and mending both for themselves and for the boys. In the laundry they learn to wash, iron and fold clothes. In the dining-room and kitchens they learn to wait on tables and to assist in cooking.

The training of the low grade defectives is a slower and more difficult problem. On account of their low mentality, the idiots are able to learn to perform only the simplest tasks. Things which normal children learn without effort and without being conscious of learning, these children must learn by a slow and tedious process, indeed, if they learn them at all. After much painstaking effort on the part of the teacher, about all we can teach these lowest in intelligence is some slight improvement in their habits and conduct. Some can be trained to eat more properly and pay some attention to other natural wants, but unfortunately not all are able to learn how to properly perform even the simplest of movements.

THE FUTURE PROBLEM.

I now wish to call the attention of the profession to the special problem of future State care of the feeble-minded in Maine. Unfortunately, we do not have any definite information as to the actual number of feeble-minded persons in the State, but since the institution

was opened at Pownal there have been requests for the admission of over 1,000 feeble-minded persons. There is every reason for believing, however, that the actual number of feeble-minded within the State is much larger.

In England and Wales, where official investigations have been made, it has been found that 1 in every 248 of the population is feeble-minded. In New York State the estimates run from 1 in 300 to 1 in 200 of the population. Throughout the United States, the lowest estimate has been given as 1 in 500 of the population. Now, if we accept the smallest proportion for Maine, or 1 feeble-minded person to 500 of the population, we would have approximately 1,500 of this class of people in the State.

What shall we do with this large number of dependent people? Let us see how the State has met similar problems in the past. As I have already stated, Maine has provided State care for the insane for nearly three-quarters of a century, or, to be exact, 73 years, and we are now caring for more than 1,500 of this worthy, but extremely unfortunate class of citizens. Why not do the same for the feeble-minded as for the insane? The feeble-minded are always dependent, and never capable of self-support without supervision. While some of them are apparently harmless, the great majority of them are a source of greater danger to the community than are the insane. It is estimated that from 25 to 40 per cent. of the reformatory, jail, and prison population belong to the class of high grade imbeciles or the defective delinquent class.

The feeble-minded girl between the ages of 15 and 45 years is a source of potential danger to the community. Recent investigations have demonstrated that the feeble-minded woman is twice as prolific as the normal woman. Dr. Goddard, of Vineland, N. J., has also found that the heredity of feeble-mindedness, for the most part, comes from the feeble-minded woman.

At the lowest estimate of the total number of feeble-minded within the State, Maine is now providing State care for 256, or for about one-sixth of the total number. Last year 437 feeble-minded were supported by the cities and towns in the State. This makes a total of nearly 700 supported by means of public funds. While all those supported by the towns, cities and relatives outside of an institution are receiving some care, we know too well that the great majority of them are not properly cared for, nor is the community protected from their dangerous tendencies. Many mothers and fathers write us that their feeble-minded boy or girl has become unmanageable in one way or another. Overseers of the poor write us that this or that feeble-minded woman has given birth to illegiti-

mate children, and that they have no means by which to prevent the recurrence of such occurrences.

The answer then, in my opinion, to the great question, "What shall Maine do with her feeble-minded?" is, "Segregation and State care." By segregating and properly caring for the feeble-minded, they themselves are made happier and more useful. Society is protected from many crimes, and future generations of feeble-minded persons can be materially decreased. Dr. H. H. Hart, of New York, has stated, "If every feeble-minded woman should be faithfully segregated for 20 years, at least 50 per cent of feeble-mindedness would disappear." Some of you may ask, "Why not sterilize the feeble-minded and thus prevent them from procreating their kind?" That, I feel, in connection with certain cases, would be a step in the right direction, but public sentiment is so strongly against it that I fear it will be at best only a partial remedy.

In closing, I wish to make a final appeal to the members of this distinguished Club, and to the profession in the State, that you will use your powerful influence for better care and training of the feeble-minded of this State, which I believe can be accomplished only by means of segregation and State care. In my opinion, the State of Maine can do no better for these innocent but irresponsible citizens than to rapidly enlarge the institution for the feeble-minded to meet the needs of the State, and continue, on a larger scale, the work already begun.

The Triple Syndrome.

Dr. Rutherford Morison of England, in a recent medical paper, urges upon the profession a more careful study of the triple syndrome, as he calls it, in abdominal emergencies, with a view to rapid operation. His syndrome consists in keeping close watch for shock, for reaction, for the emergency stage peculiar to each lesion; peritonitis from perforation, acute anæmia for hemorrhage, jaundice from gall stones. He urges that mistakes are made during the stage of shock, and that fatal results from operation follow our mistakes in this stage. The paper is illustrated with a large number of operative cases and results. In 427 appendectomies, he lost 18; in 16 cases of perforating ulcers, 4 deaths; in perforating duodenal ulcers, 17 operated upon inside of 12 hours after entrance to hospital recovered, 6 cases operated on inside of 24 hours recovered, but 2 died; of 5 operated on inside of 48 hours, 2 recovered; and of 6 cases operated on at a later stage, 2 recovered and 4 died. After all, it would seem that it is the diagnosis of the *proper time to operate* which plays a large role in successful results on any sort of cases or patients.

Case Report.

***Penetrating Gunshot Wound of the Gravid Uterus.**

BY R. A. HOLLAND, M. D., CALAIS, ME.

Mrs. R. aet. 26 years. 5½ months pregnant.

Present Illness. On Saturday morning, April 25th, was shot accidentally in the left hip. The wound was caused by a 32 calibre rifle bullet. She was brought to the hospital the same afternoon, 12 miles over rough road in an auto.

Condition on Admission. Patient was suffering from rather severe shock. There was a bullet wound of the left hip. The point of entry of the bullet was about midway between the trochanter and the crest of the ilium. The track of the bullet extended downward and backward. No foreign body could be felt with probe.

She had some abdominal pain, which was relieved by a small dose of morphia. There was also some abdominal tenderness.

Her condition remained much the same during Saturday evening and the Sunday morning following. Sunday afternoon she miscarried. The foetus was born first, followed by the cord, and then by the placenta, short intervals between each and all separate. There was a complete absence of amniotic fluid, and there was no hemorrhage. Sunday evening she complained of severe abdominal pain, and examination showed marked distention and tenderness. Her pulse and temperature were both above normal.

Late Sunday evening the abdomen was opened. It was found filled with amniotic fluid, and blood subinvoluted uterus. Fluid and clots were sponged out, and she was given a dose of Pituitrin, and the uterus was *seen* to contract rapidly and firmly. In the lower portion of the body of the uterus and just posterior to the attachment of the broad ligament, was a small hole, surrounded by an ecchymotic area about the size of a nickel. The peritoneal covering of the rectum was stripped for a short distance off its anterior surface.

The opening in the uterus was closed, and the denuded area of the rectum covered over; a drain was inserted into the pelvis, and the abdomen closed. No point of exit of the bullet was seen.

She recovered nicely from the operation, but had a small amount of foul smelling vaginal discharge. On May 2nd, she was curetted, but nothing was found. She had since made a complete recovery, and

*Read before the members of the Washington County Medical Society, Eastport, May 14, 1914.

is now doing her housework, May 18th.

There are very few cases of penetrating wounds of the gravid uterus reported in the literature. Edgar says

"This lesion is of very rare occurrence. In 1899, Estor and Pruech could find notes of but 40 cases in the literature. The wounds were inflicted by cutting or pointed instruments, projectiles, the horns of animals, etc., and could be divided into incomplete, complete and complicated. In the first named, the uterine wall was not completely penetrated. Complete penetration has been extensive enough to permit the escape of the cord, or even of the fœtus itself. In the complicated type other abdominal viscera were also wounded. The symptoms are those of shock and hæmorrhage with pain, escape of amniotic fluid, and prolapse of some of the contents of the uterus. Peritonitis resulted in a certain number of cases. About 25% of the cases were fatal from shock, hæmorrhage or peritonitis. The complicated wounds have necessarily a graver prognosis. Laparotomy may be necessary for diagnosis, and certainly will be required for rational treatment, with or without hysterectomy."

In this case the first indication we had that the uterus was wounded, was when the contents of the uterus were delivered piecemeal. Examination then showed that the bullet had entered the uterus, passed into the buttock of the fœtus, passed out of the fœtus at the umbilicus, amputating the cord there, and then gone on, and blown the top of the child's head off. When or how it also cut the cord away from the placenta, and where it came to rest can only be a matter of pure conjecture. The fœtus was presented for examination.

Human Oddities at Edinburgh

A recent number of the British Medical Journal tells us of the annual Christmas exhibit of human oddities at the Waverly market in Edinburgh. The chief interest at Christmas last, centered in the Brothers Hugo, "the Giants of the Alps," claimed to be the tallest men in Europe. Each stands eight feet high, but whilst one weighs 406 pounds, the other weighs only 322. They were born in Nice, and are very healthy in all respects. Mlle. Vallee, a young girl from Paris, is also exhibiting at the Waverly. She was born without arms, but performs wonderfully upon the piano with her toes and is clever with pen and pencil. A third man should interest physicians, for by a series of "hoists," as it were, he can increase the length of his arms four or five inches, whilst he can lengthen one arm or one leg an inch at will.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Editorial Comment.

"Damaged Goods" in Austria.

This play of Brieux has had very flattering receptions in Austria, and by order of the Minister of War, every soldier attached to the garrison around Vienna has been ordered to be present at one representation at least. Furthermore, other representations have been ordered in other garrison towns and cities throughout the empire and all soldiers of the entire Austrian army are ultimately expected to witness a picture on the stage, of the ravages of syphilis. Similar representations have been arranged for all military schools where the young men congregate. And as if that were not enough to give the soldiers of the Austro-Hungarian empire some idea of the deadly effects of syphilis, the military surgeons have been directed to conduct a series of lectures on this same topic, the effects of syphilis.

Surely the celebrated author, Brieux, could not look for any higher mark of public esteem than this reception of his celebrated play by the government of Austro-Hungary.

German Protests Against Alleged Medical Business Methods.

The crusade against "Americanism" in Germany has taken on a new phase, as we learn from recent dispatches from Germany.

It seems that for some little time past, various physicians in Berlin, especially, and in other cities in Germany have been indulging in what is called the "American business," of physicians practising from

two different offices in different parts of the large cities. Office hours in one part of the city will be from morning to noon, and the afternoon is offered and devoted to an entirely different clientage at another end of the city. This process has aroused for some time the ire of conservative German surgeons and the edict has come out at last from the Physicians and Surgeons League to this effect. That it is derogatory to a professional man to have two separate offices for practice, and that it is destructive of all educational values to make out of the former profession of medicine or surgery a mere business, of unethically obtaining clients, and of continuing them unreasonably long under observation. All such methods are incompatible with the dignity of the profession, and all physicians who after this warning indulge in such "American business methods" will be severely disciplined, after a single warning.

Physicians' Economic League.

We are glad to observe that the first local society formed for this purpose in Greater New York has lately been supported by a second branch in another part of the city. There is no question that the practice of medicine is becoming less and less sufficient for the maintenance in reasonably fair position in society, of its followers, owing to hospital abuses. Physicians ought to have authority to refuse to treat gratuitously, persons of means, no matter where they claim free treatment, for that is the sum and substance of treatment of today in our hospitals. Physicians should have a voice in the admission of patients. Patients should no longer be admitted into hospitals at large prices per diem, simply on the questions of a paid secretary. Some plan of relief for physicians will have to be worked out or the State will be obliged to come to their relief. Private hospitals cost much to maintain, the wear and tear on their owner is immense and he cannot do all the good that is in him with a constant question of money to make both ends meet.

A Malpractice Suit Following a Mastoid Operation.

We commented lately on a curious case of this sort, and we emphasized the unusual demands made upon the defendant, who was asked to describe the operation in plain common sense English, and to explain why he did not inform the patient of the risks of the operation, obtain the consent of her parents, and generally, inform the court of his skill and right to perform the operation in the hospital, at all.

The papers have since then furnished us with a reply from the defendant surgeon. From this we learn that the operation was well done some six years ago, after explaining the operation, its necessities, the various details to the plaintiff as well as to her parents and obtaining full consent from all concerned. He consulted no other surgeon in the case, for he considered himself fully competent to do the mastoid operation, had done it many times successfully before, and moreover, there was no other surgeon in the hospital with whom to consult as he was and had been for some years in sole control and charge of all operations on the mastoid. He furthermore claimed that unusual symptoms set in after the operation, and that the patient neglected to attend for treatment which might at that time have been of avail, but was useless at a later date, when the facial paralysis was established.

The newspaper reporters who read the defendant surgeon's description of the operation "in as plain English as could possibly be used," complain that the description was difficult for them to understand because it was so fully technical.

This is what might have been expected as the result of so unusual a request from the opposing council. In future requests of this sort discretion should be given to the defendant to explain the operation by means of drawings, at the expense of the plaintiff, or of the State.

Dilation in Eclampsia.

Dr. Worsle, in the *British Medical* for January 3, 1914, reports a case of eclampsia in which he utilized dilators as advocated by Bozzi and Musinga, with excellent and rapid results, and a recovery. Musinga's apparatus is more cumbersome and expensive than Bozzi's, but both should be in the accoucheur's armentarium. Worsle thinks, that "The accoucheur who carries one of these dilators will always feel that in them he possesses a ready means of helping his patients in one of the gravest complications of pregnancy and labor."

Intestinal Obstruction.

Ten cases of this condition recently mentioned in an *English Journal* by Major Nevis, I. M. S., show the various conditions which may give rise to obstruction. The causes mentioned were intussusception, volvulus, ileo-coecal intussusception, tuberculous adhesions, cancer of the rectum adherent to the uterus, adhesions and bands between the small intestines, kinking and binding of the ileum to the brim of the pelvis, volvulus of small intestine, intussusception from a round worm, and matting of intestines by pseudo anastomoses. All were operated, and six recovered.

New and Non-official Remedies.

Since publication of New and Non-official Remedies, 1914, the following articles have been accepted for inclusion with "N. N. R." Those accepted during the current month are made prominent by the use of capitals.

H. M. Alexander & Co., NORMAL HORSE SERUM; Typhoid Vaccine, Immunizing.

Antiseptic Supply Co., CAUSTICKS; CAUSTICK APPLICATIONS; SUPRICSTICKS; STYPSTICKS.

B. B. Culture Laboratory, B. B. Culture.

Farbwerke Höchst Co., Amphotropin; EREPTON.

Fairchild Bros. & Foster, Trypsin.

Hoffman-LaRoche Chemical Works, Thiocol; Syrup Thiocol, Roche; THIOCOL TABLETS.

Hynson, Westcott & Co., Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampules, H. W. & Co.

Merck & Co., Cerolin.

H. K. Mulford Co., ACNE SEROBACTERIN; Anti-Anthrax Serum, Mulford; Antistreptococcus Serum Scarlatina, Mulford; COLI SEROBACTERIN; Disinfectant Krelon, Mulford; NEISSER SEROBACTERIN; PNEUMO SEROBACTERIN; Salicylos; SCARLATINA STREPTO SEROBACTERIN; Staphylo-Serobacterin; STAPHYLO ACNE SEROBACTERIN; Strepto-Serobacterin; Typho-Serobacterin.

Riedel & Co., NEW BORNHYAL.

Reinschild Chemical Co., PHENOLPHTHALEIN AGAR.

E. R. Squibb & Sons, SODIUM BIPHOSPHATE, SQUIBB'S; Tetanus Antitoxin, Squibb.

Aseptic Chemical Co., Freeman's Russian Mineral Oil. Having been found to comply in all respects with the requirements of the U. S. Pharmacopœia for liquid petrolatum and not being in conflict with the rules, The Council held Freeman's Russian Mineral Oil a non-official article not requiring admission to New and Non-official Remedies.

Propaganda for Reform.

Theobromin Sodium Salicylate Versus "Diuretin". — Theobromin sodium salicylate, now described in New and Non-official Remedies and sold by most pharmaceutical firms, was first introduced under the therapeutically suggestive name, "Diuretin." While under its proper title it can be bought for 35 to 45 cents an ounce, the proprietary "Diuretin" costs \$1.75 an ounce. An examination in the A. M. A. Chemical Laboratory has demonstrated that the quality of the product as sold under its chemical name is equal to that sold as "Diuretin." In view of these findings physicians should learn to prescribe the drug by its chemical name (Jour. A. M. A., April 4, 1914, p. 1108.)

Tonsiline. — Newspaper advertisements assert that Tonsiline is "A quick, safe, soothing, healing antiseptic cure for sore throat." From an analysis made in the A. M. A. Chemical Laboratory, it appears that a preparation like Tonsiline will be obtained by mixing one ounce of tincture of ferric chlorid, one ounce alcohol, 280 grains potassium chlorate with sufficient water to make one pint. It contains drugs whose use for the purposes for which Tonsiline is used are being abandoned. The objection to the indiscriminate use of Tonsiline, which represents a saturated solution of potassium chlorate, is evident. (Jour. A. M. A., April 4, 1914, p. 1109.)

The Value of Mineral Waters. — The unprejudiced physician who is seeking to avail himself of the best therapeutic aids which modern medical science affords, cannot help being baffled by the conflicting claims made by the crude balneotherapy of today. He sees numerous cases in which relief has unquestionably been obtained by patients who have visited one of the many springs in this country or Europe; but when he attempts to analyze the possibilities — including rest, change of diet and environment — and to determine some standard by which he may intelligently advise those who need his help, the result is a hopeless confusion of ridiculous claims. At present mineral water therapy is a hopeless confusion. (Jour. A. M. A., April 4, 1914, p. 1907.)

The Serum Treatment of Tetanus. — The great value of anti-tetanus serum as a preventative is unquestioned. As a specific cure the serum has fallen short of expectation; nevertheless, it has decreased the mortality from tetanus. Tetanus antitoxin acts only on the toxin not yet combined with the nerve cells. This emphasizes the early and liberal use of antitoxic serum largely by intraspinal introduction in order to neutralize the toxin that still is free and on its way to the

nerve-cells, the necessity of thorough cleansing of the wound to remove all source of continued intoxication, and of conserving the strength of the patient in the hope that the morbid process caused by the toxin already in the nerve-cells may be overcome. (Jour. A. M. A., April 11, 1914, p. 1174.)

Salvarsan Therapy. — Wechselmann holds that the cases of salvarsan fatalities from encephalitis hemorrhagica were due to uremia, resulting from the irritation of the kidneys, in most cases damaged by administration of mercury. On the basis of this theory he argues for a pure salvarsan therapy in place of the generally combined mercury and arsenic treatment. He warns that salvarsan should be administered only after due consideration of the dose indicated and of the determination of absence of contra-indications. No one can dispute that nearly all the deaths from salvarsan have been caused by its indiscriminate use, either in the face of contra-indications or too large or too frequent dosage. (Jour. A. M. A., April 11, 1914, p. 1175.)

Wine of Cardui. — Wine of Cardui has vogue among women who prefer to take their booze in the form of "patent medicines." It is sold by the Chattanooga Medicine Company. John A. Patten, reputed to be the chief owner, is prominent in the Methodist Episcopal Church organization. Wine of Cardui is advertised as a cure for all manners of female diseases and though containing 20 per cent. of alcohol, women and girls are advised to use it indiscriminately. Examination in the A. M. A. Chemical Laboratory makes it probable that Wine of Cardui is a hydro-alcoholic extract of blessed thistle, containing a trace of valerian and that its medicinal properties are due principally to its alcohol content — 20.36 per cent.

Hyperol. — Hyperol is exploited by the Purdue Frederick Company as "A Utero-Ovarian Corrective and Tonic" and is asserted to be "Indicated in all functional diseases of women." It is claimed to contain hydrastin, aloin, iron salts, apiol and ergotin. A report of the Council on Pharmacy and Chemistry announces that Hyperol conflicts with the following rules of the Council: Rule 4, in that statements on the label and in the circular enclosed with the trade package advertise it to the public in the treatment of diseases; Rule 6, in that exaggerated and unwarranted claims are made for its therapeutic qualities; Rule 8, in that the name of this pharmaceutical mixture fails to disclose the potent constituents, and Rule 10, in that it is unscientific. The mixture is as unscientific as it is unnecessary. It cannot be adapted to any individual case; when ergot is indicated, apiol would naturally be contra-indicated; if aloes is appropriate, hydrastis may defeat the object sought. It is unnecessary because

no intelligent physician would prescribe such a combination of drugs in any given case. (Jour. A. M. A., April 18, 1914, p. 1271.)

Friedmann Vaccine. — Referring to the exploitation of Friedmann's vaccine by ex-mayor Rose of Milwaukee, the Southern Medical Journal suggests that "Mr. Rose will be remembered by Alabama physicians as the apostle from the city made famous by certain brews of beer who a few years ago came into our State to instruct from the public platform our people regarding the health-giving properties of alcoholic beverages. He is probably prompted by the same philanthropic impulses, when he attempts to inform physicians and the public of the 'miraculous results' of the serum that made Friedmann famous as well as rich." (Jour. A. M. A., April 18, 1914, p. 1272.)

Friedmann and the Newspapers. — The officers of the Society of German Sanatorium Physicians protest against New York newspaper accounts which made it appear that their society had feasted Friedmann and endorsed his cure. Those who, incidental to a meeting of the society, inspected the Friedmann Institute were of the opinion that the cases under observation had been badly observed and as a whole could not be considered as successes or cures. (Jour. A. M. A., April 18, 1914, p. 1273.)

Duket's Consumption Cure. — The backers of the Chicago exploitation of the Duket consumption "cure" now admit that the treatment is without merit, that it is vastly inferior to approved systems of treatment of pulmonary tuberculosis and that the treatment may lead to albuminuria. While the "cure" was given wide publicity through the newspapers, the public has not been informed of the unfavorable findings. (Jour. A. M. A., April 25, 1914, p. 1347.)

Centenary of Sir James Paget.

On Sunday, the 11th of January, 1914, the centenary of the birth of this very celebrated English physician and surgeon was celebrated in a very fitting way in the Parish Church of Great Yarmouth, England, with which Sir James and his family were long connected. A commemorative sermon and additional services were preached and carried through before an audience of more than 4,000 people, by the Lord Bishop of Stepney, England, a son of the distinguished practitioner of medicine. These services were attended by the Lord Mayor in State, and a large number of officials and celebrated men in all the professions from throughout the United Kingdom. Various pieces of silver were also given to the town, from the family of Sir James, as perpetual memorials to a citizen of Great Yarmouth.

Book Reviews.

The Practice of Pediatrics.

By Charles Gilmore Kerley, M. D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Octavo of 878 pages, 139 illustrations. Philadelphia and London: W. B. Saunders Company, 1914. Cloth, \$6.00 net; half morocco, \$7.50 net.

To the practitioner who has consulted Prof. Kerley's previous work on "The Treatment of Diseases of Children," the appearance of his new and most comprehensive book entitled "The Practice of Pediatrics" will be a source of real pleasure. The great value of the previous as well as the present work is one which only the exceptional medical volume possesses; namely the splendid and careful description given to the author's own lines of treatment. The busy practitioner may for example look up the subject of whooping-cough or perchance enuresis; he will find given in explicit detail the description of the line of treatment which the author has proven from a large clinical experience to be the best. It is interesting to note in the field of infant feeding that the author has little use for the much vaunted calorimetric standard and reserves the "Eiweiss Milch" and "Malt-Soup" feeding for definite cases. The book is most complete in its scope and will surely take its place as a standard work in pediatrics. P. P. T.

Diseases of the Stomach, Intestines and Pancreas.

By Robert Coleman Kemp, M. D., Professor of Gastrointestinal Diseases, New York School of Clinical Medicine. Second edition, revised and enlarged. Octavo of 1021 pages, with 388 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$6.50 net; half morocco, \$8.00 net.

There are several new subjects which have been introduced in this second edition, notably chapters on colon bacillus infection and on diseases of the pancreas. The second on Duodenal Ulcer has been rewritten.

It has been the author's endeavor to furnish the general practitioner with a working knowledge of the subject, and to select for him from the great accumulation of material the most practical methods. This work is in every sense up to date, and we are glad of an opportunity to call the attention of our readers to so valuable a work.

The volume is substantially bound, carefully indexed, and the illustrations are very numerous, and also very clear and add much to the value of the work.

Principles and Practice of Obstetrics.

By Joseph B. DeLee, A. M., M. D., Professor of Obstetrics at the Northwestern University Medical School. Large 8 vo. of 1,060 pages, with 913 illustrations, 150 of them in colors. Phil-

adelphia and London. W. B. Saunders Company, 1913. Cloth, \$8.00 net; half morocco, \$9.50.

On the more than one thousand pages of this book, the student, the regular practitioner and specialist will find something new and useful. The arrangement of the book at once commends itself. For instance, all of the most important matter is in large print and the less important part is in smaller type. The cuts, plates and photographs are almost entirely new and original, which lends freshness to the work. Where operative procedures are necessary, anyone following the various steps by the plates will at once have a clear and easy conception to the text. It will be a standard work for years to come.

Sexual Impotence.

By Victor G. Vecki, M. D., Consulting Genito-Urinary Surgeon to the Mount Zion Hospital, San Francisco. Fourth edition, enlarged. 12 mo., of 394 pages. Cloth, \$2.25 net. Philadelphia and London: W. B. Saunders Company, 1912.

The fourth edition of this book is in response to the demands of the profession. As such subjects are better understood, they are recognized as essential factors in medical practice and are being treated accordingly. Vecki is one of our leading authorities on genito-urinary matters and this book is as comprehensive as any in our literature upon the important and little-studied subject of impotence.

Stammering and Cognate Defects of Speech.

By C. S. Bluemel. In two volumes. Volume I, Psychology of Stammering. Vol. II, Contemporaneous Systems of Treating Stammering; Their Possibilities and Limitations. New York. G. E. Stechert & Co. 1913. (Price \$5.)

Five years of investigation have sufficed, in the opinion of the author, to arrive at an apparently satisfactory explanation of the various paradoxes concerning the cause of stammering. All of these investigations are amply discussed in the first volume of this very readable work. To it we cheerfully commend all those who are interested in advanced psychological investigations, for in it they will find abundant proof of the author's theories, one main idea being that between the mental defect of aphasia and stammering, there remain psychological connections that cannot be denied.

The second volume goes into infinite details concerning the innumerable systems, good, bad or useless which are pushed forward for the consideration, investigation, monetary investment and swindling of the afflicted. In Bluemel's opinion, only a final determination of the psychological relations of each individual patient will develop for that person the system most available for his cure. The author admits that the Golden Age of a Cure for Stammering has not yet been attained, and that the investigation and treatment of his defect continues in a state of disrepute which, by this work, he hopes to eradicate.

An excellent glossary, bibliography, and index add enormously to the value of these two volumes, easy to read and easy to handle, and to those physicians who have patients afflicted with stammering, we most heartily commend this excellent monograph.

J. A. S.

Review of Current Literature.

(Surgery, Gynecology and Obstetrics, April, 1914.)

The Pituitary Gland in Its Relation to Epilepsy.

By Geo. C. Johnston, M. D., Pittsburgh, Pa.

Dr. Johnston begins his very interesting discussion of this subject by pointing out the fact that most previous investigations on the pituitary had been concerned with a microscopic study of the gland structure, while a study of the pituitary region had been overlooked. He says that nature has considered the pituitary of such importance that she has located it in about the most inaccessible and strongly fortified position in the body. Lying in a deep depression on the roof of the sphenoidal sinuses, it is covered by the dura and well protected from pressure by the anterior and posterior clinoid processes.

An X-Ray examination of the pituitary region in over 100 cases of epilepsy has brought out the following interesting facts. In chronic or congenital epileptics very little of interest was found. But in the class of cases which showed no trouble in childhood but somewhere between the ages of 15 and 35 years began to develop petit-mal, gradually increasing in severity and frequency, he found rather constant changes in the topography of the sella turcica. These changes consisted for the most part in an overgrowth of the anterior and posterior clinoid processes, which, in addition to an increase in area and length, are slowly folded over and down upon the pituitary gland, enclosing it within a bony casket. The fossa also in the course of time, becomes smaller and we may also expect the gland itself to atrophy. At first this was looked upon as an anatomical deviation but the frequency with which the condition was found was very striking and soon Dr. Johnston and his associates got so that from the clinical history of the patient they could prophesy almost the exact degree of roofing in a given case.

As Cushing and others have shown that hypopituitarism was accompanied by epilepsy or epileptiform seizures, Dr. Johnston believes that the body overgrowth of the clinoid processes may cause pressure on the gland and a decrease in blood supply and its fundamental activity.

For treatment he suggested that the gland extract may be combined with the bromide treatment and after a time, the bromide cut down and dropped. He also expresses the hope that safe operative technique may be developed to reach this region.

P. P. T.

(Surgery, Gynecology and Obstetrics.)

Treatment of Recurrences and Metastases from Carcinoma of the Breast.

BY GEORGE E. PFAHLER, PHILADELPHIA, PA.

In the hitherto hopeless field of recurrent cancer, this paper from so distinguished a Röntgenologist as Dr. Pfahler is most encouraging. While he states that complete success is still the exception in the treatment, he shows that in many cases the X-Ray, if properly used, will cause the disappearance of even the most extensive recurrent and metastatic growths. He has been able to cause the disease to disappear when it covered the greater portion of the chest as a large ulcerating mass. Fifteen cases are described in detail, in some of which the results are indeed wonderful. In one case a very rapid disappearance of a large growth took place in forty-eight hours and parts of the malignant growth, which had not been exposed to the rays, were observed to disappear. This would seem to indicate a stimulation of antibodies by the röntgen ray which is a most valuable observation.

The chief features of interest about the technique are the manner of application of the rays and the method of filtering the rays. The rays are applied from as many directions as possible and with as deep and long penetration as feasible. The rays are filtered through leather and aluminum and the surrounding skin well protected with lead foil. By the aid of the Sabouraud's pastiles the dose of the ray is kept within the erythema limit.

A distinct adjunct to the ray treatment Dr. Pfahler has found to be the continuous administration of small quantities of thyroid glands. Also the patient's general health should be especially well looked after.

P. P. T.

(Surgery, Gynecology and Obstetrics.)

Reports from the Clinical Congress of Surgeons of North America.

The reports of the several committees of the Clinical Congress of Surgeons of North America are of particular interest to surgeons and members of hospital staffs. A splendid and economical end-result record system is described which might well be universally adopted.

In the report of the Cancer Campaign Committee, a description of the work already done is given. The publicity work has been mainly in the line of carefully written articles showing the symptoms of cancer, with its dangers and the advantages of early operation. Mr. Samuel Hopkins Adams was chosen to write the articles and, after visiting several large surgical clinics and collecting data, he wrote several splen-

did articles, the best of which were published in the *Ladies' Home Journal*, in May, 1913. Other articles were written for *McClure's* and *Collier's* and all have been widely copied by the press of the United States and Canada. At the meeting of the Congress, many surgeons reported cases that had presented themselves early as a direct result of reading one of these articles.

It is interesting to know that in June, Mr. Adams was made an associate member of the A. M. A. In trying to collect statistics on cancer, the committee has found that in all but a few hospitals the end-result and pathological reports were most meagre. They urge that it is of little value to push such a campaign if the surgeon is not fitted, when he sees early cases, to make a diagnosis and that every hospital should have a trained pathologist and should follow out its end results.

In regard to radium and cancer, they feel that we need more radium and longer study of its effects. There are only three or four surgeons in America today who have a sufficient quantity to use as it should be. There is not much over one grain in the United States and as it takes over one hundred milligrams often to treat certain forms of cancer the position is clearly one of lack of sufficient quantity.

P. P. T.

(American Medical Journal, Mar. 14, 1914.)

Rupture of the Uterus Following Cesarean Ssection.

By Louis J. Breitstein, B. S., M. D.

The field of cæsarean section has been enlarged to include certain cases of eclampsia, placenta prævia, as well as cases which show physiological incompetence for labor. As a result we are accumulating in our midst, a number of cæsareanized women with normal pelves, who are going about with scars in their uteri. How should subsequent pregnancies in these cases be managed? Here the author cites a case.

Mrs. N., aged 17, had a cæsarean section performed on account of hematoma blocking the pelvic canal, in March, 1909. Following operation had a temperature with profuse discharge. Was discharged in 24 days. In June, 1911, had a normal labor. In April, 1913, was again admitted to hospital pregnant and on examination a ruptured uterus was found. Operation exposed a dead baby in abdominal cavity. Uterus was found ruptured in old scar. Hysterectomy was performed. Patient had uneventful recovery.

From this case, we see that a cæsareanized woman may have a subsequent pregnancy terminate in one or two ways. Namely, spontaneously in vaginal route or with rupture of the uterus. Neither of these is the usual course. Some miscarry, but the majority have to be delivered by repeated cesarean section. True, rupture of the uterus

following section is rare. Vasseur estimates that rupture occurs in 2% of cases.

The rupture generally takes place in the scar but not necessarily so. A scar healing by first intention will stand a strain equal to the uterine muscle, but in healing by second intention the picture is entirely different. Here we have granulating tissue in the scar which will not stand the strain of overdistention of labor.

A placenta implanted in a scar soon invades the soft connective tissue. Trophoblastic tissue and chorionic will penetrate the softened scar and weaken it so that it is a question whether or not it can stand the stress and strain of labor.

CONCLUSIONS.

1. A cesareanized woman who gives a history of an infection with a purulent vaginal discharge in the puerperium is a good candidate for rupture of the uterus in one of her subsequent pregnancies.

2. The mere fact that a cesareanized woman has delivered herself spontaneously is no reason for believing that she is free from the danger of rupture of the uterus with her future pregnancies.

3. Rupture of a cesarean section scar generally takes place in a scar usually from the improper wound healing in the presence of infection.

4. The implantation of the placenta in the site of the scar may so weaken the uterine tissue that it may rupture under the stress and strain of labor.

5. I firmly believe that cesarean section should be limited to those cases in which it is strictly necessary. If there is any possible chance for the uterine wound to become infected some operative measure for sterilizing the patient should be employed.

6. A cesareanized woman should be in a maternity hospital during the last month of her subsequent pregnancies so as to be under constant medical supervision.

M. A. W.

(*Journal Cutaneous Diseases and Syphilis*, February, 1914.)

Intermittent Attacks of Dermatitis, Probably Due to Arsenic.

BY GEORGE F. HARDING, M. D., BOSTON.

Dr. Harding presents a history secured by much questioning of a mother and daughter, together with facts obtained from five physicians who were consulted by them at different times.

The mother and daughter were referred to him for alopecia of long standing. They were in rather poor physical condition, their hair had the dry lifeless appearance such as one sees after a prolonged illness, and they and all the other members of the family had had

persistent attacks of furunculosis during the past year and a half.

Dr. Harding suggested arsenic as a cause for these symptoms, and positive findings were obtained in the urine of five members of the household.

It was then remembered, that before these attacks began, some powder had been sprinkled around for destruction of insects in the kitchen and other rooms of the apartment. Scrapings of dust from the rooms, upon examination, showed 1.44% arsenious acid.

The family consisting of a father, mother, daughter of twelve, and baby, with a housemaid and nurse as servants, had been living in ordinary conditions of health in a moderate sized apartment. Suddenly the housemaid developed an eczematous condition of the hands and paronychia, and later a furuncle on the arm. This condition continued for eight months, in spite of varied treatment. At the end of that time she left and obtained a position elsewhere, the condition clearing up shortly after. Her place was filled by a person who came in from time to time, and she developed the same type of eczematous dermatitis. Soon after the housemaid's attack, the daughter developed a furuncle on the thigh, and one on the elbow, and a little later a good many small pustulo-follicular lesions. Next the mother had a furuncle on the arm, then the hand, then the thigh, and a little later a small pustular eruption between the fingers. Within a month the baby after an intestinal upset, began to develop furuncles and later a more or less general pustular dermatitis. The nurse, a German woman about sixty years of age, suffered a general furunculosis which appeared about the time that the baby was affected. Later her condition became so serious that she was sent to a neighboring hospital, where the condition cleared up only to recur when she returned to the apartment. The husband had occasional furuncles mostly about the head and neck. On two occasions when he went away on fishing trips, the furuncles cleared up but recurred when he returned home.

These eruptions continued as long as the family remained in this apartment, a matter of eighteen months, and disappeared shortly after they had moved.

Culture of the *Staphylococcus aureus* was taken from these lesions, and autogenous vaccines unsuccessfully used.

There was constitutional disturbance and alopecia in each member of the family.

The remarkable feature of these cases was the type of lesion, furuncular and pustular.

Dr. Brayton in his discussion of this paper, remarked that he had had a patient, a worker in a paris green factory, and suffering from

a dermatitis of the hand, feet, ankles, and scrotum of a painful erythematous and papular type, who made the statement that no man could work in that factory longer than two or three weeks, without suffering from a similar eruption. B. F.

New York Medical Records, November 15, 1913.

Premonitory Auræ in Inebriety.

T. D. CROUTHERS, M. D.

The writer distinguishes between the ordinary form of alcoholism in which spirits are taken regularly, and inebriety which is characterized by periodical attacks or drink paroxysms between which are longer or shorter intervals of abstinence. "The term inebriety describes a neuro-psycosis, the symptoms of which are convulsive demands for spirits, to the stage of complete narcotism." Thus inebriety is not a fundamental symptom but rather a manifestation of a peculiar sort of neurotic constitution.

These recurrent paroxysms are manifested not only by a periodical craving for alcohol but also by other accompanying mental changes and the whole may be preceded by premonitory signs or "auræ" which indicate that an attack is imminent.

These auræ are of various kinds and may consist in motor, sensory, and vasomotor signs and often by sudden changes in mood and disposition.

A motor aura may show itself by an unwonted activity. The patient may begin all at once to work far beyond his usual habit or may begin suddenly to take up some form of sport such as base ball, golf, or rowing, and pursue it with extreme energy for several days and then be overcome by the drink craving which later subsides to be followed by a normal period.

Another premonitory sign may be a change of mood and an individual ordinarily of serene disposition may become irritable or pessimistic and suffer from a dread of some oncoming danger to himself or his family.

In other instances the aura may be manifested by a sudden religious enthusiasm or a zeal for promoting some reform, while in other cases immorality or actual criminal tendency such as kleptomania may usher in the attack. In the later instance the public generally believes that the person drinks in order to cover up or lessen the magnitude of his unseemly acts, while in reality both the criminal tendencies and the excessive alcoholic indulgence are merely manifestations of a transitory abnormal mental state.

The writer believes the recognition of these various auræ is important because thereby possibilities for treatment are opened up but as to the details of treatment he does not specify. H. M. S.

*Maine Medical Association

Program of the Portland Session, at the City Hall,

Wednesday and Thursday, June 10 and 11.

Clinics will be arranged for.

Thursday

JUNE 9, MORNING SESSION, 9.00.

HOUSE OF DELEGATES. — Will meet at 8 p. m., in the old dining-rooms at the Congress Square Hotel, on Tuesday, June 9th, and at other times as may be necessary, subject to call of President.

THE COUNCIL. — Will meet at the close of meetings of the House of Delegates and at such other time as may be necessary.

Wednesday

JUNE 10, MORNING SESSION, 9.00.

Call to order by the President.

W. C. Peters, Bangor.

Invocation.

Rev. A. D. Leavitt, Portland.

Address of Welcome.

B. F. Dunn, Portland,
Pres. of Cumberland Co. Med. Soc.

Introduction of Visiting Delegates.

Conservation of Vision from the Point of View of Ophthalmia, Trachoma, Gonorrhea and Syphilis.

H. T. Clough, Bangor.

Discussion opened by Dr. C. E. Norton, Lewiston, and Dr. E. E. Brown, Bangor.

Pneumonia.

E. C. Cook, York Village.

Abstract. Lobar pneumonia is a constitutional disease with a local focus of infection. A distinct disease with certain well defined symptoms and pathology. It is necessary to recognize the disease early and not confuse the condition with other diseases. Up to the present time, we have no treatment for the disease itself, all efforts should be directed to treating the patient.

Discussion opened by Dr. Addison Thayer, Portland.

Pellagra.

H. L. Bartlett, Norway.

Discussion opened by Dr. E. W. Gehring, Portland.

Surgical Diarrheas.

S. G. Gant, New York.

Abstract. First: I shall point out that Surgical Diarrhea occurs very much more frequently than is suspected. Second: I shall mention or briefly discuss the types and their causes of diarrhea which respond to surgical measures — often after other therapeutic measures have been tried and failed. Third: The operations suitable in this class of cases, some of which are original, will be discussed. Finally: I shall outline the post-operative treatment and indicate the complications and results which may be expected from the surgical treatment of diarrhea.

Discussion opened by Dr. W. L. Cousins, Portland, and Dr. B. B. Foster, Portland.

AFTERNOON SESSION, 2.00.

President's Address.

W. C. Peters, Bangor.

Salvarsan.

H. K. Tuttle, Tewksbury, Mass.

Abstract. A review of 300 cases of syphilis treated with mercury and the iodides; the length of time necessary for curing the lesions; the percentage of apparent cures and relapses; the expense to hospital and patient; the advantages and disadvantages of this method of treatment.

Citation of cases to show the resistance of the treponema pallida to this form of treatment.

A review of 230 cases treated with Old Salvarsan "606," and about 400 cases treated with neosalvarsan "914."

Indications and contra-indications.

Technique of administration.

Reactions following; bad results observed, and one fatal case of acute arsenical poisoning.

Treatment of serious poisoning following salvarsan and neosalvarsan.

Effect of the treatment on the lesions.

Financial saving to the hospital and the patient.

Results in cases of papsaesis, tabes dorsalis, pregnant women with syphilis, and the newborn.

Citation of cases to illustrate benefits of treatment.

Results of subsequent Wasserman tests.

Percentage of relapses.

Cases of reinfection.

Question of the reliability of the Wasserman test in certain lesions of tuberculosis. Advantages and disadvantages of combining mercury and salvarsan.

Our present short-comings in the treatment of syphilis.

Discussion opened by Dr. F. N. Whittier, Brunswick, and Dr. H. E. Thompson, Bangor.

Sterilization of the Unfit.

Henry M. Swift, Portland.

Abstract. Public expenditure for the care of the insane and defective classes is increasing in a somewhat alarming manner, both on account of the increasing number of commitments which conforms to the natural growth of the population and on account of the accumulation of patients already under care.

In times to come may not this ever increasing burden become greater than the community can bear and may not the adoption of measures tending to lessen it be imperative?

A diminution in the prevalence of mental abnormality can be affected only by an attack upon its causation.

The most potent factor in the causation of mental abnormality is heredity sometimes acting alone and sometimes associated with other causes.

If all the mentally abnormal were to be prevented from propagating there would result in all probability a tremendous decrease in the number of such cases in future generations.

Such wholesale measures are impracticable but the segregation and subsequent sterilization of the higher grades of the feeble minded and allied classes would seem to offer possibilities although even here many obstacles must be overcome.

In a number of states, sterilization laws have been passed, but in only two or three have they been carried into effect.

Measures of this kind can be carried out only if intelligent public opinion demands them or at any rate does not oppose.

Thus it might appear that the first step toward the introduction of practice of sterilization should be the attempt to make the public feel its advisability.

Until such an attempt is successful, little in the way of sterilization will probably ever be done.

Discussion opened by Dr. S. C. Gordon, Portland, Dr. F. C. Tyson, Augusta, and Dr. C. J. Hedin, West Pownal.

ANNUAL ORATION.

Value of Social Service Work in Hospitals as a Part of Efficient Diagnosis and Treatment.

R. C. Cabot, Boston, Mass.

Members are requested to announce their names and residences on arising to discuss papers.

RECEPTION AND ANNUAL BANQUET

Will be held at Congress Square Hotel at 7.30 P. M.

Toastmaster, W. C. Peters, Bangor.
Dr. Woods Hutchinson of New York and others will respond to toasts.

Thursday

JUNE 11, MORNING SESSION, 9.00.

Surgery of the Kidney. Case Reports with Observations.

John Sturgis, Auburn.

Discussion opened by Dr. John F. Thompson, Portland.

Use and Mis-Use of Hexamethylenamine (Urotropin).

C. M. Robinson, Portland.

Abstract. History of hexamethylenamine. The elimination of the drug through various channels. The resulting claims for the drug in many diseases of bacterial and non-bacterial origin. Conditions necessary for the activity of the drug. Its toxicity. The importance to clinicians of the results of scientific investigation of the subject.

Discussion opened by Dr. T. J. Burrage, Portland.

Heart Stimulation.

C. H. Hunt, Portland.

Abstract. The three causes of circulatory failure:—

- (a) Hemorrhage.
- (b) Vaso motor failure.
- (c) Heart failure.

Methods of treatment of each variety.

Discussion opened by Dr. E. J. McDonough, Portland, and Dr. L. A. Derry, Portland.

The Treatment of Diseases of Vegetable Parasitic Origin by Deep Muscular Injections of Mercury.

B. L. Wright, Portsmouth, N. H., Surgeon, U. S. N.

Abstract. Brief introduction. Ehrlich's theory. Two cardinal facts deduced from it. My own theory. Its application in the chemotherapy of these diseases. Case reports. Reports of independent workers along these lines. Souligoux of Paris, Krohl of Germany, Prof. Maccelli of Rome, etc. Conclusions.

Discussion opened by Dr. T. W. Luce, Portsmouth, N. H., and Dr. G. A. Pudor, Portland.

AFTERNOON SESSION, 2.00.

Visceral Ptosis.

Richard F. Chase, Boston, Mass.

Abstract. This paper is based mainly on an observation of 400 consecutive female patients, examined with reference to prolapse of the abdominal organs. The cases recorded include only the more marked degrees of ptosis; thus, by comparing the percentage of occurrence of these cases with the usual percentages found and reported, the writer shows that a very large percentage of all ptosis cases are of but slight degree. In view of the recent findings of the roentgenologist as regards the normal position of the stomach and colon, the writer concludes that many cases considered as gastro-ptosis and coloptosis ought not to be diagnosed as such, because the organs are really within, what the X-Rays show, as normal limits of position.

Many of the causes of ptosis are presented as found in this series of cases, also the physical condition of the patients, weight loss, posture, etc.

The percentage of occurrence of the symptoms usually met in enteroptosis is given and it is much smaller than is generally thought. After considering the contributing factors to ptosis, the physical conditions and the symptoms presented by these patients, the writer feels that the indications for treatment should be apparent to any physician and that it should not be difficult to see that many of these cases require no treatment whatever for the ptosis per se. Just because the stomach is an inch lower than what we have formerly considered normal does not often mean a gastropexy and not always by any means an abdominal belt.

By quoting several prominent surgeons, the writer sets forth the status of surgery in relation to visceral ptosis and it seems that in but comparatively few cases surgical procedure is called for.

Discussion opened by Dr. D. A. Robinson, Bangor, and Dr. W. E. Webber, Lewiston.

The Intrinsic Value of Tobacco.

C. W. Pillsbury, Saco.

Abstract. Botanical history of tobacco, when and where first used. The manner of use. The physiological effect. Its value and uses in medicine. Its uses among the aborigines in religious rites. The extent of its use in medicine and as a luxury. Symptoms of chronic poisoning. The opinion of different authors as to its permanent injury to the system. Quotations from some of the leading physicians of the United States and Canada, etc.

Discussion opened by Dr. S. J. Bassford, Portland.

Report of Committee on Necrology.

J. A. Spalding, Portland.

Report of House of Delegates.

Report of Council.

Election of President.

4.30 P. M. Sail and Clam Bake.

The Cumberland County Medical Society cordially invites the members of the Maine Medical Association to a sail down the bay, followed by a clam bake at Long Island. Tickets for the annual banquet and clam bake should be secured at the time of registration.

The Eye and Ear Section will hold a business meeting in the City Hall at 11 o'clock, on June 10.

Personal News and Notes.

Dr. Louis W. Parady has left Springvale recently and located in Rumford.

Dr. and Mrs. C. J. Emery have returned to Biddeford, having visited Dr. and Mrs. F. F. Fair in Chicago, Ill., for several weeks. Mrs. Fair was Miss Helen B. Emery.

Dr. Chas. E. Lander, Alfred, is a Republican candidate for nomination as representative in the Maine legislature in the class district of Alfred, Limerick and Shapleigh.

Dr. Cragin of Waterville is expected home from Europe the first week in June and is much improved in health.

We regret to note the death of Mrs. Ida May Cochrane, wife of Dr. J. D. Cochrane of Saco, Tuesday night, May 26.

Drs. H. F. Twitchell and F. Y. Gilbert of Portland, attended the meeting of the New Hampshire Medical Society as delegates from Maine.

Dr. H. E. Milliken of Portland has moved his office from 181 State St. to the Y. M. C. A. Building.

Dr. L. W. Fox of Philadelphia, while a guest of Dr. F. J. Hill of Waterville, during the past month, gave a very interesting clinic at the Sisters' Hospital where a number of very interesting operations were done and cases demonstrated. Dr. Hill extended an invitation to all the oculists of the State and some few general practitioners to attend the clinic, providing accommodations to and from the train.

Following the clinic those in attendance were the guests of Dr. Hill at a dinner at the Belgrade hotel, where Dr. Fox was the guest of honor. Following the dinner, brief speeches were made by Governor Haines, who very cordially welcomed Dr. Fox to the State of Maine, while Dr. W. C. Peters, President of the Maine Medical Association, welcomed him in behalf of the profession of the State, and Dr. Holt spoke in most pleasing terms of his early acquaintance with Dr. Fox, which continued in a very profitable and pleasing manner over a period of some years.

Dr. Fox's remarks were mainly on the work he had tried to accomplish along the lines of higher education and he proved to be a very forcible and interesting speaker. After some very pleasant remarks from Dr. Hill, the meeting was adjourned and a social hour enjoyed before the party broke up to return to their homes, convinced

that Waterville is a wonderfully good place to go to and that Dr. Hill is a rarely good entertainer.

Those present at the banquet were Drs. L. W. Fox of Philadelphia; Governor W. T. Haines, Dr. F. C. Thayer, Waterville; Drs. E. E. Holt, James A. Spalding, W. B. Moulton, John W. Bowers, F. Y. Gilbert, E. E. Holt, Jr., Portland; Drs. W. C. Peters, E. E. Brown, H. T. Clough, W. E. Whitney, Bangor; Drs. Wellington Johnson, O. W. Turner, S. J. Beach, Augusta; Drs. T. E. Hardy, E. E. Goodrich, C. W. Abbott, L. G. Bunker, E. W. Boyer, F. J. Hill, Waterville; Harvey D. Eaton, Frank Reddington, George K. Boutelle, Waterville.



County News.

CUMBERLAND.

PORTLAND MEDICAL CLUB.

The fifth meeting of the year was held at the Columbia Hotel on Thursday evening, May 7th. Thirty members were present.

Dr. Carl J. Hedin of West Pownal was elected to membership in the club.

Dr. Adam P. Leighton, Jr., Dr. Stanwood E. Fisher and Dr. Carl M. Robinson were elected as a committee to arrange for the annual outing of the club at Spurwink.

Interesting case reports were contributed by Drs. Fisher, Warren, Swasey and Little.

Dr. Daniel Driscoll read a paper entitled "My Experience with the Phylacogens" with eighteen case reports indicative of his results, which proved extremely interesting to the club, and evoked a lively discussion. Most of the members who reported cases were not so favorably impressed with the results obtained from phylacogens as was Dr. Driscoll.

Dr. Hedin then read a paper outlining the work done at the State School for the Feeble-Minded at Pownal. This paper is reproduced elsewhere in this issue. It made so great an impression upon the members of the club that they voted to use their influence to give it as wide a circulation as possible among the physicians and laity of the State, by insertion in the newspapers throughout the State.

The meeting adjourned at 10.30 p. m.

ROLAND B. MOORE, *Secretary.*

HANCOCK.

The Hancock County Medical Society held a regular meeting at the residence of Dr. E. J. Morrison, Bar Harbor, Wednesday, May 20. Dr. Walter Gilbert of Calais read an interesting paper entitled, "Facts and Fallacies in Treatment of Diseases of the Eye." The paper was very practical, giving the general practitioner a good outline for the care of common eye ailments.

Dr. H. B. Webster of Castine read a paper on "Hyperacidity in Pyloric Ulcer." Dr. Webster always has something good in his papers and discussions and thinks nothing of the fifty-two mile auto drive from Castine in order to be present at a county medical meeting.

The social meeting afterward was very much enjoyed, especially the buffet lunch and "fish" story, tendered by the host of the evening, Dr. E. J. Morrison. G. A. NEAL, *Secretary*.

KENNEBEC.

Kennebec County Medical Association held its quarterly meeting at the new Augusta House, the first of April. Dr. Abbott of Portland gave a very fine address on "Crooked Spines," illustrated.

At this meeting Dr. S. J. Beach was elected Secretary, to fill the vacancy caused by the resignation of H. W. Miller, who has left the State. W. JOHNSON, *County Editor*.

PENOBSCOT.

The April meeting of the Penobscot County Medical Association was held at the Bangor House, Tuesday evening, April 19th, Dr. Geo. E. Landry of Oldtown presiding.

As it was the last meeting until Fall, there was no regular order of business.

Four new members were voted into the Association, Drs. Arthur C. Strout of Garland, Jepson F. London of Millinocket, Ralph N. Knowles of Bangor and Cornelius J. Taylor of Orono.

After a bounteous supper, all adjourned to the Bijou to see the pictures and vaudeville. JOHN B. THOMPSON, *County Editor*.

WASHINGTON.

The regular meeting of the Washington County Medical Society was held at the City Rooms, Eastport, May 14th, at 10 a. m.

The subject of the evening was "The Surgical Kidney with reports of cases and discussion.

Dr. R. A. Holland reported a case of "Penetrating Gunshot Wound of the Gravid Uterus." H. B. MASON, *Secretary*.

= = WANTED = = **OCULISTS' PRESCRIPTION WORK.**

We offer the facilities of a large shop.
Every order receives the personal attention of one of the firm.
Only the best of material is used and we never substitute.
The small orders are appreciated as well as the large.
A trial will convince you of our accuracy and promptness.

THE SMITH-SOMES CO.

... OPTICIANS ...

578 Congress Street,

Opp. Congress Square Hotel

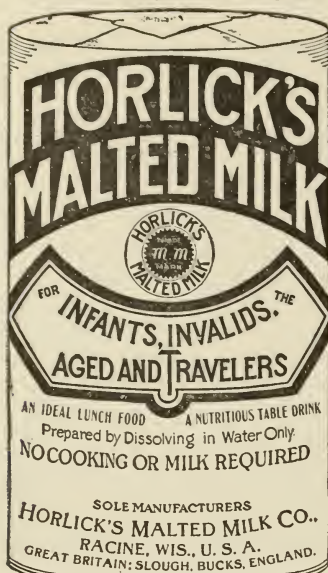
Index of Subjects, Vol. IV.

- | | |
|---|--|
| <p style="text-align: center;">A</p> <p>Address, The President's, (O) 1501
 Address, The President's, (E) 1532
 Advertising, (E) 1858
 Albuminuric Retinitis, Artificial De-
 livery in, (E) 1776
 Alcoholic Psychoses, (O) 1516
 Alleged Medical Business Methods,
 German Protests against, (E) 1901
 American College of Surgeons, (E) 1645
 Artificial Drum Heads, (E) 1730
 Artificial Pneumothorax, (O) 1617
 Artificial Pneumothorax, (E) 1643
 Augusta State Hospital, (E) 1685
 Autopsies, (E) 1641
 Aviators, Vision of, (E) 1606</p> <p style="text-align: center;">B</p> <p>Board of Health, City of Portland,
 Me., (E) 1570
 Border-Line, Diagnosis and Treatment
 of, (J) 1781
 Broncho-Pneumonia in Children, (O) 1816</p> <p style="text-align: center;">C</p> <p>Cardiac Sign in Cancer, (E) 1536
 Chronic Suppurative Otitis Media,
 Conservative Treatment of, (O) 1841
 Civilization and Refraction, (E) 1827
 Clinical Congress of Surgeons, (E) 1644
 Cocain Law and Some of its Curious
 Provisions, (E) 1775
 Common Drinking Cups and Tow-
 els, (E) 1829
 Compound Fracture, Conservative
 Treatment of, (O) 1545
 Compound Fracture, Radical Treatment
 of, (E) 1550
 County News and Notes, (E) 1645
 County Secretaries and Editors, (E) 1728
 Corrosive Sublimate Tablets, Poisoning
 from, (E) 1646</p> <p style="text-align: center;">D</p> <p>"Damaged Goods" in Austria, (E) 1901
 Damages claimed for an Asserted
 Faulty Mastoid Operation, (E) 1777
 Disbursement of Appropriations to In-
 stitutions Receiving State Aid,
 an Act Relating to, (M) 1650</p> <p style="text-align: center;">E</p> <p>Ear Ache, (E) 1827
 Eclampsia, Cause and Cure of, (O) 1712
 Ectopic Gestation, (O) 1705
 Educating Trained Nurses, Correspond-
 ence School System of, (E) 1608
 Emmenagogues for Immoral Purposes,
 Reputable Manufacturing Pharma-
 cists do not Furnish, (E) 1693
 Esperanto in Medical Germany, (E) 1607
 Exophthalmic Goiter, Symposium on, (J) 1771
 Eye: Its Connection with Diseases
 and Injuries of the Body, (O) 1581</p> <p style="text-align: center;">F</p> <p>Feeble-Minded in Maine, State Care
 and Training of, (O) 1894
 Fee Splitting Bill, (E) 1533
 Fee Splitting Bill, Iowa City on, (E) 1534
 Football and Physical Efficiency, (O) 1639
 Fractures, Use of X-Ray in, (O) 1538
 Fractures, Treatment of with Lane
 Plates, (O) 1553</p> | <p style="text-align: center;">G</p> <p>General Arteriosclerosis, Relation of
 to Certain Ocular Conditions, (J) 1823
 General Welfare of the Deaf, Society
 for Promoting, (E) 1859
 Glaucoma, Trephining for, (E) 1689
 Goiter, (E) 1646
 Goiter, The Etiology of, (O) 1597
 Gout, Its Relation to Gouty Diseases
 of the Eye, (J) 1824</p> <p style="text-align: center;">H</p> <p>Heroinism, (O) 1670
 Hearing, Conservation of, (O) 1762
 Hospital, An Example for Every, (E) 1687
 Hospitals, Standardization of, (E) 1726</p> <p style="text-align: center;">I</p> <p>Infants, Remarks on Feeding of, (O) 1883
 Intermittent Claudication with X-
 Ray Findings, A Case of, (O) 1812
 International Medical Congress, Aug.,
 1913, (E) 1647
 International Medical Congress, Med-
 ical History at, (H) 1695
 Iodine, Centennial of, (H) 1695</p> <p style="text-align: center;">K</p> <p>Kerosene the Probable Fuel of the
 Future, (E) 1776</p> <p style="text-align: center;">L</p> <p>Leucocyte Extracts in Infective Pro-
 cesses, Clinical Studies on the Cu-
 rative Action of, (J) 1782
 Light, Too Much, (E) 1692
 Lodge Practice, (E) 1535</p> <p style="text-align: center;">M</p> <p>Major Genito-Urinary Surgery, Value
 of Pre-Operative Study in, (O) 1508
 Mal-Practice Suit, Another, (E) 1725
 Mastoid Operation, Mal-practice suit
 following, (E) 1902
 Medical Notes, (J) 1734
 Medical Pilgrimage, (O) 1679
 Mental Diseases, Some Phases of Im-
 portance to the General Prac-
 titioner, (O) 1765
 Mental Hygiene Conference, N. Y.,
 Nov. 8-15, 1912, Proceedings
 of, (O) 1635
 Mileage Under British Insurance
 Laws, (E) 1691
 Milk Investigation in Scotland, (E) 1860
 Morphine and Other Hypnotic Narcotic
 Drugs, An Act to Regulate the
 Sale of, (M) 1793
 Motor Car Electric Head Lights, (E) 1536</p> <p style="text-align: center;">N</p> <p>Neisser Infection of Female Genitals
 in Relation to Pregnancy, (O) 1799
 New Ophthalmological Journal in Ger-
 many, (E) 1828
 Non-Proprietary Mixtures, Eligibility
 of, (E) 1862
 Nose, Throat and Ear, Role of, to
 General Diseases, (O) 1588</p> |
|---|--|

O			W		
Official Organizer,	(E)	1568	Workmen's Compensation Law in Wisconsin for 1913,	(E)	1729
P			White Slave Trade. Is its Existence Proved or is it Merely a Hysterical Exaggeration?	(E)	1778
Parsons, Usher, U. S. N.,	(E)	1537	X		
Perforating Ulcers in Typhoid, Three Successful Operations for,	(E)	1731	X-Ray, Use in Fractures,	(O)	1558
Physicians, Co-operation Among,	(E)	1569	Y		
Physicians' Economic League,	(E)	1902	Yellow and Blue as Danger Signals for Railroads and Ships,	(E)	1692
Prophylaxis of Typhoid Fever by Injection of Killed Cultures, Some Aspects of,	(J)	1737	Z		
Prophylaxis in the Army,	(O)	1661	Zouave Jacob,	(H)	1831
Proposed Ophthalmological Congress, St. Petersburg, 1914, Boycott of,	(E)	1730	NECROLOGY		
Pubiotomy vs. Caesarean Section in Neglected Cases,	(J)	1825	Beede, Joshua William,		1571
Pulmonary Hemorrhage,	(E)	1692	Cowie, William,		1540
Pulmotor and the Respirator,	(E)	1567	Downs, Arthur Adelbert,		1648
Q			Fuller, Edwin Motley,		1611
Quassia and Its Discoverer,	(H)	1831	Maverick, Augustus,		1572
R			Nettleship, Edward,		1722
Reformatory for Women, A Proposed Act for,	(M)	1863	Pennell, Walter Johnson,		1683
S			Price, Charles Wallace,		1539
Scarlet Red in Eye,	(J)	1542	Rice, William Edgar,		1721
Sclero-Keratitis and Chronic Gutta-Ocular Tuberculosis, Experimental Production of,	(J)	1824	Small, Edward Mariana,		1540
Shock,	(J)	1736	Weeks, Ambrose Herbert,		1573
Spontaneous Hemorrhages, Significance of,	(J)	1826	TRANSACTIONS		
State Board of Charities and the Powers and Duties Thereof, An Act Creating,	(M)	1650	Council,		1497
St. Longinus, Blindness of,	(H)	1830	General Session,		1429
Strychnia Poisoning,	(E)	1691	House of Delegates,		1439
Sympathetic Ophthalmia, Its Genesis, Treatment and Prophylaxis,	(O)	1756	Report of Secretary,		1440
Syphilis, The Prevalence and some of the Consequences of,	(J)	1881	Report of Treasurer,		1483
T			Report of Necrologist,		1433
Telephonic Rest for Busy Doctors,	(E)	1860	CASE REPORTS		
Termination "Pathy," Meaning of,	(E)	1535	Penetrating Gunshot Wound of the Gravid Uterus,		1899
Thyroid, Antitoxic Functions in the Pathogenesis and Treatment of Goiter,	(O)	1749	Pernicious Anemia,		1820
Typhoid in French Army, Preventive Vaccination Against,	(E)	1646	INDEX OF AUTHORS		
Tuberculous Children, Open Air School for,	(E)	1603	Allen, J. H., M. D., Portland, Me.,		1841
Tuberculous Children, Open Air or Open Window School for and Its Cost,	(E)	1605	Coues, W. P., M. D., Boston, Mass.,		1812
U			Cunningham, J. H., Jr., M. D., Boston, Mass.,		1508
Ultra-Violet Light as a Germicidal Agent,	(J)	1824	Damon, A. H., M. D., Limestone, Me.,		1816
Uterine Fibroids and Malignant Tumors, Roentgen Rays, Radium and Mesothorium in Treatment of,	(J)	1825	Fisher, S. E., M. D., Portland, Me.,		1588
Uterine Hemorrhage Associated with Hypertrophy and Sclerosis of the Uterine Vessels,	(J)	1826	Gehring, E. W., M. D., Portland, Me.,		1689
V			Gilbert, F. Y., M. D., Portland, Me.,		1847
Vermont Medical Society,	(E)	1604	Hedin, C. J., M. D., West Pownal,		1894
Varicose Veins of the Leg, New Italian Method of Operating for,	(E)	1861	Holland, R. A., M. D., Calais,		1899
Vision, Conservation of,	(O)	1847	Hunt, Hiram, M. D., Greenville, Me.,		1545
Vision, Conservation of,	(E)	1689,	Lamb, F. W., M. D., Portland, Me.,		1558
		1724	Leighton, A. P., Jr., M. D., Portland, Me.,		1712
			Leslie, F. E., M. D., Andover, Me.,		1597 and 1771
			Marsh, R. H., M. D., Guilford, Me.,		1501
			Morse, J. L., A. M., M. D., Boston, Mass.,		1883
			Moulton, W. Bean, M. D., Portland, Me.,		1705
			Peters, W. C., M. D., Bangor, Me.,		1550
			Sajous, C. E. DeM., M. D., Philadelphia, Pa.,		1749
			Sawyer, A. D., M. D., Ft. Fairfield, Me.,		1553
			Sellew, P. K., M. D., Brookline, Mass.,		1670
			Spalding, J. A., M. D., Portland, Me.,		1581 & 1679
			Sturtevant, J. M., Portland, Me.,		1820
			Swift, H. M., M. D., Portland, Me.,		1635 & 1765
			Tyson, F. C., M. D., Augusta, Me.,		1516
			Ward, P. M., M. D., Houlton, Me.,		1762
			Webber, M. C., M. D., Portland, Me.,		1756
			Welch, F. J., M. D., Portland, Me.,		1617
			Wilson, W. H., M. D., Ft. McDonald, Cal.,		1661
			Young, E. B., M. D., Boston, Mass.,		1799

*The letters used to explain in which department the matter indexed appears, are as follows: (O) Original Article, (E) Editorial, (J) Journal Review, (M) Medico-Legal, (H) Medico-Historical.

ACCEPT NO IMITATIONS



ASK FOR HORLICK'S

During the Summer months

The question of infant mortality bears a close relation to the milk supply

Physicians realize that *clean milk* is most desirable for everyone, and indispensable for infants, invalids and young children.

Anticipate and avoid risks and dangers attending the milk supply from unknown sources by using

ORIGINAL



GENUINE

"HORLICK'S" contains clean milk, has a delicious flavor and is easily digested

Horlick's Malted Milk Company

Slough, Buck's, England

Racine, Wisconsin

Montreal, Canada

Phone: Schuyler 9500
Connecting all Branches

ESTABLISHED 1901

Cable Address
"Townscot"

CHARLES B. TOWNS HOSPITAL

Exclusively

For the Treatment of Drug Addiction and Alcoholism

117-119 W. 81st St.

NEW YORK

An **Annex** has been added to this Hospital for the accommodation of patients of moderate means.

The treatment, attention and medical attendance are identical in every respect with that of the Main Hospital, where the patient is provided with a private room or suite, for which the charge is in accordance.

The **Annex** is not so restricted in the matter of privacy, in consideration of which the charges are moderate, making it possible for a patient of limited means to receive the same treatment. A definite charge is made in advance which is *final*, includes *everything* until the completion of the treatment. There are no "extras."

Physicians sending patients are invited to remain in attendance and follow every detail of the medication.

Write for booklet, "Physician's Guide for the Treatment of the Drug Habit and Alcoholism."

Consulting Physicians Constantly in Communication. Staff of Resident Physicians Always in Attendance

THE JOURNAL

OF THE

Maine Medical Association.

Published under direction of the Council of the Maine Medical Association

All papers, case reports, etc., should be type-written when possible.

Proof-sheets will be sent to the author when requested.

Communicate with the printer early regarding reprints, as the best rates can be had during time that the paper is on the press for the Journal.

The Journal assumes no responsibility for opinions expressed by the authors.

VOL. IV.

JULY, 1914.

NO. 12

*ANNUAL ADDRESS OF PRESIDENT.

BY W. C. PETERS, M. D., BANGOR, ME.

Gentlemen of the Maine Medical Association —

There are two subjects which should receive our careful consideration at this time and upon which I wish to speak briefly. Medical charity, which concerns our profession only, and medical legislation, which is of vital importance to the public as well.

Until the present generation medical charity was purely a personal affair. The country practitioner toiled impartially among his people, bringing comfort and good cheer to all. He collected what he could, charged the balance (a large one) to charity and was thankful for the privilege of engaging in a profession which brought such an opportunity for service and which had, as its reward, the love and respect of the entire community. But times have changed. A much larger part of the work is done in cities and towns and here the medical profession is being slowly but surely crowded by the charity organizations. Hospitals are springing up like mushrooms, free dispensaries are common and various orders and societies are attempting to contract for medical treatment at absurdly low rates.

Medical charities, as at present organized, necessitate free service of the physician; and, while the individual may consider the advantages of the clinic ample return for services rendered, the principle is wrong and the injustice to the general practitioner is great.

Let us analyze some of the existing evils and consider possible remedies.

*Read before the 62nd session of the Maine Medical Association at Portland, June 10, 1914.

The charity hospital is primarily intended for the poor and for such, the present ward rates are too high. This is the result of a constant desire to enlarge accommodations and spread a given amount of money over too great a number. In order to make both ends meet, patients who can pay a higher rate are preferred and, curiously enough, we have our attention called to the large amounts collected from ward patients as if this were something of which to boast. It would be much better to treat a smaller number of deserving poor at a lower rate.

The private room in the charity hospital is an exaggerated form of this evil. People are taken into these rooms as "hospital patients" and pay nothing for medical attendance. The number of private rooms in a charity hospital should be sufficient merely to accommodate sick members of the hospital force and the occasional patient, whose critical condition requires isolation and extra care. These rooms should never be given to patients simply because of their ability to pay. The argument that the total number of private rooms is small so that the damage done is not great, is a poor one. It is the principle that is wrong and the fact that such free treatment is offered in nearby institutions is used as an argument to beat down the regular prices charged by physicians in the surrounding territory. Charity hospitals should not be run as boarding houses for the well-to-do sick in competition with the general practitioner. Such people should be treated at home or in private hospitals.

Ward rates should be low and, displayed prominently near the entrance, should be a large placard such as is posted at the Rhode Island State Hospital in Providence, stating that "the services of the physicians in attendance are given free, and are for the poor only. Patients, who are able to pay a physician, will not be treated in this hospital except in cases of recent accident, emergency or sudden illness. All patients wishing to receive treatment should bring a letter of recommendation from some physician in good standing, from the agent of some charitable institution or from some person known to the inspector. If the patient does not bring such a letter, he is requested to sign a statement that he is unable to pay for professional services and that he desires charitable aid."

There should also be a regular method of inspection. At the Rhode Island Hospital each patient admitted is taken to a private room where he is quietly and politely questioned as to his position in life, his business, wages, number in family, number of dependents and wage earners, reasons for applying at the hospital, etc. At the above mentioned hospital these methods resulted in the reduction of applications by over fifty per cent, and I strongly recommend them to the

managers, superintendents and trustees of hospitals throughout the State. In most of our institutions in Maine, it is a sad fact that the only question asked an applicant is "Can you pay your board bill?"

In hospitals already built with a comparatively large number of private rooms, and where for various reasons the above plan cannot, or will not, be adopted, all patients occupying private rooms should be required to pay the attending physician a fee for professional services unless excused for reasons satisfactory to the superintendent. In small cities and towns where hospitals of this character exist, all the local physicians of good repute should be allowed to treat patients in private rooms. This is the method practised in all hospitals in New Hampshire and many in Massachusetts, where it is said to give satisfaction. In cities of over 15,000 population, this method is well nigh impossible and a limited staff is of course necessary (the more limited the better) but in such institutions, private room patients should not be received, ward rates should be low and investigation rigid.

It has been the custom for all these charitable hospitals to seek help from the State and, at the present time, twenty-eight such institutions receive \$93,750.00 annually. The function of the State is not to provide treatment for its sick poor, except in cases of special diseases and in institutions which it entirely supports and controls, such as insane hospitals. In this State, such gifts are accepted under a most vicious law, which requires hospitals receiving State aid to place the ward rate at the actual cost of maintenance; which rate is obtained by dividing all money spent by the total number of patients, including those in private rooms. The result is that in most cases the ward rate is very nearly \$2.00 per day, a price which is absurd to expect from the class of people who should be in these hospitals. This law works automatically to attract those moderately able to pay and exclude the others and so diverts the money from the very people it was intended to help.

I do not wish to have this question at all confounded with the one of public health. It is the function and, in fact, the duty of the State to apply every modern method toward the prevention of disease, but is it not an anomaly for the State to give general hospitals a hundred thousand dollars a year while it hands the State Board of Health the beggarly sum of \$16,317.35 with which to protect all our people against disease and enforce laws for the same? Of course the hospitals at present receiving State aid cannot be cut off at one blow, but the tendency should be downward.

If the legislature really desires reform in this direction and wishes to make such appropriations purely upon the merits of the case, it

would be quite easy to do so in future by acting upon the suggestions of the newly organized Board of Charities and Corrections.

Tuberculosis, like insanity, should be considered as a separate problem. The object to be obtained by the State in dealing with this disease is not the cure of individuals who are sick, but the protection of the community from contagion by aiding in the isolation of dangerous cases.

The State should make special provision for this disease, either by building State hospitals for the care of patients suffering from pulmonary tuberculosis, promoting county hospitals or aiding existing institutions. I hope to see this matter thoroughly considered at a conference of all persons interested in the work, to be held in Augusta this fall.

I believe in industrial insurance for the working man and hope we may sometime adopt a system similar to that of Germany. Under this law the wage earner is provided for in case of sickness and the doctor is paid, but until that time, I think we should unite to control these gradually growing evils. We must not, however, look at this matter from a purely personal standpoint, but rather view it in its broader aspect as it concerns the public and the profession as a whole.

To summarize briefly — In order that the public and the profession may work hand in hand, hospitals should be built on an economical plan and should be used, so far as possible, for the poor.

Such hospitals should not be larger than available funds will maintain, thus avoiding competition with the medical profession.

Where existing hospitals already have private rooms, which must be kept filled to provide funds for maintenance, such rooms should be used, so far as possible, only for patients who pay the physician.

State aid for general hospitals should be discouraged or at least confined to those which treat only poor people at low rates.

In other words, private and charity hospitals should not be combined.

When hospitals are properly conducted, physicians will be glad to co-operate with organized charity for the relief of a class of people to whom, for generations, they have given their services without thought of remuneration.

The other subject I wish to touch upon comes under the head of medical legislation. For several years the group of practitioners styling themselves osteopaths have sought recognition before the legislature and requested a separate board, under whose authority they should be examined and licensed to practice as doctors. If any considerable number of people in this State wish treatment of a certain kind, they should, under proper restrictions, have an opportunity to obtain it,

and such restrictions should be directed solely toward protecting the public against fraud and incompetence.

The question, as it presents itself to this Association, is what shall be our attitude toward this class of practitioners when the matter comes up before the next session of the legislature? There would seem to be but two courses open to us. We may continue our opposition as in past years or we may propose a new law which shall create a general medical board with an osteopathic member, and, under this law, require the so-called osteopaths to take the regular examination in all subjects except therapeutics. This latter course involves casting to the winds all requirements except the examination and we fall back upon the State Board as the only protection for ourselves and the public.

If they are licensed in the regular manner we should be willing to consult with them, but if they are licensed by their own board, their standard will be so low, we cannot afford to have any professional relations with them whatever.

Personally, I would continue the opposition and raise our standards still further by requiring more preliminary education rather than less.

When our homeopathic brethren came upon the field, they merely proposed a new system of therapeutics. Medicine was an inexact science, treatment was largely empirical. I believe the profession needed the influence of their extreme methods to bring about a more rational point of view. But medicine is now more of an exact science and it involves long and patient work for which more and more preliminary training is necessary. Before we lower our standards, I think we should examine our motives very carefully and be sure that we are not merely trying to prevent competition.

You have appointed a committee to investigate this matter and report its recommendations to the Association. This committee, a majority of whom believe in a compromise, has draughted a bill which will be presented for your consideration. I am placing the matter before you now merely that you may be prepared to give it free discussion and the consideration it deserves.

These questions and many others demand our united action. This is a day of organization, and the great advantage to the profession of a strong, united medical association like this is not half appreciated. Organized on the county unit plan, it should be a power for good and every physician in the State should consider it his duty to become a member.

It is a great honor to be chosen as its President and I felt this deeply when I rose to call to order the sixty-second annual meeting of the Maine Medical Association.

*VALUE OF SOCIAL SERVICE WORK IN HOSPITALS AS A PART OF EFFICIENT DIAGNOSIS AND TREATMENT.

R. C. CABOT, M. D., BOSTON, MASS.

Gentlemen: The subject I am to speak of this afternoon, "Some Functions of Social Work in Hospitals," I think I can introduce to you best by saying that it is the attempt to do, under city conditions and in hospitals, exactly what every first rate general practitioner in a small town or country district always does, and always has done. There is nothing in what I have to say that in any way concerns the general practitioner in a small town or country district. He is doing already, as I say, the things which I am trying to get done as they are not now done in hospital practice. If, then, a good deal of what I say sounds perfectly familiar to you, and as if I were perhaps trying to teach my grandmother to suck eggs, you will understand why it is.

Now the conditions of hospital work in city life mean this, among other things. The doctor does not know his patient. He does not know his patient in the same intimate way, in the same personal, long-lived way, that he does in general practice in the country. He does not know the patient's family; he does not know the patient's work; he does not know the patient's habits and temperament; and he cannot learn them in anything like the same way. He sees a patient for a few days or a few weeks, and he sees him separated, isolated, from his natural environment, and he makes mistakes, or omits important parts of diagnosis and treatment, as a result of that.

The general formula which seems to me to cover all that, I mean by social work, is the attempt to finish up a good job which has been begun but left unfinished. Hospital diagnoses are good as a rule. They are mistaken often; but, on the whole, they are less often mistaken than any other kind of diagnosis that I know. But when it comes to treatment, the hospital physician does not stand out prominently at all as compared with his brother physicians outside. As I have seen hospital physicians and compared them with men practicing outside of hospitals, it seems to me that their diagnosis is better and their treatment worse; and their treatment is worse largely for the reasons I have tried to suggest,—that they know the patient only partially, and a person who knows his patient only partially cannot treat him in the best way. I think as I go through the details I have sketched out for you upon the circular which is in your hands, you will see that the general formulæ that I give there at the beginning apply.

*Stenographic report of the annual oration of the 62nd session of the Maine Medical Association, June 10, 1914.

Take in the first place industrial disease, a disease that comes to a man from his job. The hospital physician, the city doctor, does not know at all, in an intimate way, the industrial side of his patient's life. The general practitioner in the country town does, and that is where he has the advantage, and that is why he does better work in this respect. Industrial disease is a pretty new part of general medicine as understood in this country. The most of us do not know much of anything about industrial disease. Even the commonest varieties like lead poisoning are very little understood, as I find it among my colleagues. They recognize that poisoning when a patient has a wrist-drop or any other late symptoms, but they do not recognize it early; and one of the reasons why they do not recognize it early is that they do not know in what occupations they ought to be on the watch for industrial disease. Almost all of us know enough to watch for lead poisoning in painters, but I know a good many men who do not know enough to watch for it in rubber workers — people working in rubber factories; and yet, as I see it, there is no more frequent source of lead poisoning than rubber factories. One of the things that social service workers do in hospitals is to trace out exactly what the patient does; not in a general way, not merely that he is a laborer or a factory worker, but what material he handles in his daily job, what he is touching, or what he is liable to get into his system. The national and local societies interested in industrial disease are always complaining that, when they go to hospitals and attempt to look up hospital statistics of industrial disease, they can find nothing; and that is true today. So far as I know, there is not a hospital in this country that has any properly kept records and statistics in relation to the occupation of patients. You go to the Johns Hopkins Hospital, or the Massachusetts General Hospital, or the Pennsylvania Hospital — any of the hospitals that stand high — and look at their records in relation to the occupation of the patient, and you will find vague, general, statements like "factory worker" or "laborer," which do not mean anything, and which do not tell us in the least what dangers from poisoning the patient is most likely to be exposed to; and that is one of the things, as I have already said, that I think the country practitioner, who is not merely a doctor in the narrow sense, but who knows something of human life outside of medicine, generally knows a good deal more about. Our social service workers, men and women trained and paid for this work, try, among other things, to follow up occupation into all those relations that may bear upon health; but, secondly, they try to follow a case home as if that case itself were a symptom. If there is one case of lead poisoning that turns up in your office or at a hospital, that means more cases somewhere. However

that patient got it, somebody else has got it. He is a focus, not exactly of infection, but of intoxication; and one of the things that seems to us only a part of decent church work is to follow up every case that shows the presence of a focus of intoxication somewhere else, and see if we cannot do a little work in the way of finding other cases, and perhaps finding them just before they become cases; finding them before they get sick. That is preventive work, the kind of work, I believe, that, when we can do it, gives us all more satisfaction than any other type of work.

And then we try to do a little educational work. We try to educate the lead patient, the patient who has had lead poisoning, the painter, or the printer, or the rubber worker, how not to get that same poisoning again in case he is unable to change his job. You know probably, if you know anything about industrial disease, that the average worker may be told just how he got it, and how to avoid getting it again, but he does nothing about it. He goes on doing just what he did before and he gets it again. It must be brought home to him just what kind of a fool he is. It takes time, but it is worth it, and it can be done. One of our State Inspectors of factory work tells me that in his rounds through the factories to see whether the laws of those factories regarding industrial hygiene are enforced, he often finds a state of things like this: It is an especially dusty trade. The law compels the manufacturer to provide a respirator, a mask, which the person exposed to this special dust shall wear; and, when the inspector goes and looks around for the mask, he finds it hanging on the wall and not worn by the man who ought to be wearing it. That naturally makes the employer a little "hot under the collar." He is compelled by law to provide these things and pay for them, and the employee won't use them. And why not? Well, for the same reason that I have given. He does not really understand the need; he does not really believe their need; or, what is often true in my experience, he does not care much anyway; does not care enough about his life to really take the trouble. He says it is too much bother; he had rather take the risk. There is a chance for educational work, especially with men who have not been at the trade very long. But we try to do educational work also with employers; for instance, those who employ painters — which I suppose includes the most of us in this room. Sooner or later we have somebody to do some painting somewhere about our place; and, unless you are a great deal more humane and more careful than the most of us are, you do not take all the possible precautions to prevent that individual from getting lead poisoning. I have seen, for instance, in my own house, and been ashamed to find that men doing painting there had no proper

place to wash their hands before they ate their lunch, that they ate their lunch just where they were working and without washing their hands; and I have done nothing, and the most of my colleagues whom I have questioned about this have done nothing to prevent men getting lead poisoning while painting upon their premises. We have issued from the Massachusetts General Social Service Department a circular to all the painters and all the printers in the State of Massachusetts, telling them in as plain language and in as forcible language as we can just how they get lead poisoning, and how they can avoid it; and we have issued a similar circular to employers which we are sending around in the same way, and through speakers at clubs, and so on, trying to rub in this point.

Now how does this work I have just spoken of exemplify the definition I gave you at the beginning of finishing up a good job, begun but left unfinished? Ordinarily, a man comes to our hospital for lead poisoning. He is perhaps relieved of lead poisoning and sent home, and that is the end, ordinarily, unless Social Service takes hold of it. We call that a good job, well begun, but not finished. No proper instruction is given to that individual, or to his workmates, or to his employers.

Secondly, I will speak briefly of our work for the handicapped. By a handicapped individual, handicapped through industry, I mean to distinguish certain patients from those who are incapacitated. A handicapped man is one who has got good working strength left, and ought to work, or who, because he has lost an arm, or a leg, or an eye, or his hearing, does not easily fit into the industrial machine. Now our experience with these cases in the last three years, taking them and trying to find jobs for them, and keeping them in those jobs, is something like this: You have noticed probably—those of you who have treated many cases of pneumonia—that the pneumonia case may be divided into three groups, namely: Those that will get well anyway, whatever you do, those that will die anyway, whatever you do, and thirdly a rather small group where what you do means the difference between life and death. It is the same way with the handicapped people. There is the group that will get a job anyway—you could not prevent them from getting a job. They include the most of the men who have lost a leg. A one-legged man can generally get a job, and generally does get a job without any help from anybody. At the other extreme are the men who are incapacitated, for whom no one can get a job, or whom no one can keep in a job; and those, of course, we leave on one side. But between these two extremes, the people who will get along without us anyway, and those whom nobody can help, there is a middle zone, as there is in all parts of therapeutics,

where what we do makes some difference. We have one worker, one woman trained for this work, trained in the details of industry in and about Boston to an extent which shows her where a one-legged man, or a one-armed man, or a deaf man can be fitted in; and I should like to give you some of the figures of her usefulness in financial terms. We pay her \$1,200 a year, and I figured up just before coming here the actual wages of the people for whom she secured work in the last year — people who had been out of work indefinitely before that, and presumably would be out of work indefinitely if she had not taken hold of them. The wages of people for whom she secured work in the last twelve months aggregate \$6,500 a year, or just about six times her salary. In other words, if you had invested money in her salary, as I have, you would be getting a 600 per cent return on your investment. I do not know of any better investment than that in times like these. It would seem that anybody who thinks just what it means to have persons chronically out of work, with the financial effects and moral effects, will realize the importance of work of this kind. Again, I have seen many of the best class of general practitioners in the country doing things in this line without calling it social service, without talking about it, in a quiet way, and doing them just as well as we are doing; but I do not find people as a rule in the big cities, or the hospitals, taking this sort of care of their handicapped patients.

For the chronically ill, incapacitated, all that we do is to try and find out what the State of Massachusetts, or the resources of the community, or of friends, or lodge-mates, or church associates, can do to help out those chronically ill people. We do not try to make them self-supporting when we know they ought not to work; but we do try to find out what there is that the community can do for them. It is a surprising thing in a city like Boston how many institutions there are willing and anxious to help one or another kind of sufferer, but perfectly unknown to the hospitals and the hospital doctors. Again and again we have found that a charity or an institution meant to help a certain class of sufferers, and nobody knew of their existence until one of our social service workers hunted them up. I do not suppose that here, or in most of the cities of the State of Maine, you are overburdened with charities who are eager to help out in this sort of way. Neither are we; and yet I find that there are a very few people in the City of Boston who know how to use all the charity that exists. That is one of the things that a social worker in a hospital would need to know, namely, the resources of the community, public and private, and to use them, focus them upon the need of the individuals that circulate through that hospital.

Third: Work with cases of infectious disease. Of course, the social worker has nothing to do with the diagnosis and treatment of those cases; but with us it seems as important that somebody should follow up those cases as those of lead poisoning. One case of tuberculosis means two, three, and possibly more. Every time a man or woman with tuberculosis comes to us, we try to round up all the children in that family, and get them to be examined whether they complain of anything or not. That is simple, and probably is done in this State, as it is in most others. But we are trying to extend this to syphilis. When a syphilitic turns up (and we have 3,000 syphilitics a year at the Massachusetts General) we try to see who else in that family is, or is likely to become, syphilitic; and, as you may imagine, that is a pretty delicate job. But I think you will be surprised, as I have been, to find how much on the whole, people welcome this. People are beginning to understand that syphilis is one of the most contagious and dangerous diseases that exist; that it is much more contagious than leprosy or tuberculosis; and that we have got to treat it as a contagious and dangerous disease. We try to protect the children in a family, and I think sometimes we accomplish it. It is much more difficult to do this with gonorrhoea; but we have tackled especially the problem of gonorrhoeal vulvo-vaginitis of little girls, the non-venereal type. This, without any fault on the part of the girls, is spread by towels, sponges and baths, and it runs through an institution with a contagion that is unequalled by that of any disease that I know of. Those cases as they come to the ordinary hospital are treated — the individual is treated. Now we are not finishing up our job unless we look beyond the individual. Social service is the attempt to do that.

Now briefly to speak of the drug habits. You gentlemen know these things well enough to know that most of them, under the ordinary resources of human nature, cannot be cured. We do not pretend to cure them all or to cure any large proportion of them; but what we say is this: If you will take 100 cases of morphinism or alcoholism and study them, you will find a small number, perhaps ten per cent, different from the other ninety per cent, who will respond to the something that you can do, but who would not pull themselves out of the mess by themselves. I would not have believed, for instance, if I had not had it in my own experience, that a man may be drinking himself to death and not know that there is any harm in alcohol. I have known of a good many men drinking themselves to death who knew perfectly well that they were doing it and doing it on purpose. I have seen one man who did not know what he was doing, and who was perfectly willing to stop drinking, and did so when he was informed

of the effects that any of you know as well as you know your a, b, c's. You will find such a case as that now and then; or you will find a case where the ordinary forms of human friendship may reach out and pull up an alcoholic or a morphinist. We distinguish between the alcoholic or morphinist who is such on the basis of degeneracy, on the basis of poor stock, from those which may be called relatively incidental. I should class in the latter group the cases of morphinism among physicians, which in my experience is very common. I have seen no profession with so large a percentage of morphine cases as physicians. This is due to the fact that the physician is so closely associated with morphine. These are not hopeless cases, and I have seen a great many of them cured. I may as well say here, although it has nothing much to do with my subject, that I have a very firm belief in the efficacy of the Townes-Lambert treatment for morphinism. I have seen at least 100 patients of my own treated by that method, which has, you know, been published in the Journal of the American Medical Association and is entirely open to anybody to use. I have been enthusiastic with the results that I have seen. But, of course, I know with that, as with any other method, there is a large percentage of failures; and what I have chiefly to say is that the mistake we make is to give up the whole 100 per cent merely because 60, 70 or 90 per cent are, as we know, hard or impossible to cure.

Now cardiac disease I take as typical of the chronic disease as we see it in all our great hospitals. I am very much dissatisfied with the routine treatment of cardiac disease; not because it does not begin well; not because we do not put the people temporarily on their feet as the result of rest and cardiac stimulation; but because it is a matter merely of temporary improvement for a little while, and then sending them back to their former conditions. To allow a man to work, is perfectly sure to bring him back to the hospital again in a short time in exactly the same state of health as he was before. The most of our cardiac cases, and the most of our renal cases, are repeaters; and, even from the point of view of hospital economy, this seems a short-sighted way to treat them. If it is worth while for the hospital to take them in, it is worth while to do what it can to prevent their coming back again and again, and taking the hospital's money. I have repeatedly seen cases of cardiac disease come into the hospital, get a good deal done toward compensation, and be sent out without dropsy; but the hospital taking no special interest in the patient after he left the hospital, that patient would go right back to a tenement house, four flights up, perhaps, climb those stairs again day after day, and in a very short time be just as badly off as he was before, when, if a certain amount of bother and trouble, and a little expense, had been put on to

make him get a ground floor room, he might have lived months, if not years, more without breaking down the second time. We try, then, now, through our social service workers, to finish up the job of treating the cardiac patient, not merely to get the dropsy out of his legs, peritoneum and lungs, but to try and work out a modified habit of life for him which he can maintain without a rupture of compensation the second, third and fourth times.

The problem of cardiac disease in children is a much more hopeful one, I think; but it is treated just as stupidly, just as blunderingly, in most of our hospitals. A child comes to the hospital with cardiac disease. Now all of you know, I suppose, that a child who has the rheumatic type of heart disease under twenty-one usually dies. If he can get by twenty-one, he has a good chance of living twenty, thirty or forty years more. Changes take place in his heart valves about the age of twenty-one whereby the bacilli which may be circulating through his body do not take root and multiply there. The cardiac valves are very vascular up to twenty-one; they are very non-vascular after that. If the child, therefore, can in some way be protected from infection, or re-infection and repeated infection, up to that age, he is quite likely to live out his life, or live twenty, thirty or forty years, with a very decent, although somewhat weakened, heart. In practical terms that means this: That the child shall be protected in every way that is in our power from re-infection. The child's heart goes to pieces not ordinarily from mechanical causes. It is not because he runs and plays too hard. Sometimes it is that, but not as a rule. As a rule, he gets a re-infection — fever chills — and starts in again with an acute endocarditis on top of his valvular trouble. Prevention of this, of course, is not possible, but it is a matter we can do something about; and the thing that makes the greatest single difference, I think, is rest. Now if you have ever tried to keep a small child at rest, you know just about what sort of a job it is. We have done a great deal of perfectly useless preaching at the hospital in the past, telling parents that they must keep the child quiet for weeks or months, not realizing that we might as well have been talking to a stone wall. We have found, however, that supervision in the home by social service workers, women who visit the home, is in a considerable proportion of cases effective. We do succeed in keeping these children quiet and in getting them by these dangerous years, so that their hearts have a chance to heal and become decently strong.

Another important point for these children is this: They must be taught some trade — more of a skilled trade as a rule than those with whom they have been brought up. They have got to be taught

some trade that they can do without using their muscles for heavy work. A man with cardiac disease in middle life who has learned no skilled trade is practically out of industrial life. He cannot learn a trade that requires skill, and cannot practice his old trade; but if a child or young person can be taught something that he can do sitting still, or using his fingers, it will make a great difference in his ability to live on in later life.

Sixthly, we try to do whatever we can for the sex problems that turn up in every great hospital, as they do in the practice of every busy physician. I do not under-estimate the difficulty of doing anything of importance for such people and for such problems as these; but with these cases, as with the alcoholic and the morphinist, if you will not become hopeless, if you will keep some hope, you will accomplish now and then something which will make all your other failures worth while. Again I will say, as I have watched the work of general practitioners in the country, they are doing what ought to be done in this matter, and need no teaching from me; but the hospitals, and the busier men in city practice, are not doing it because they cannot do it with the kind of practice they have. With the little they know about their patients, they cannot possibly enter into these delicate and difficult sex problems. We have special women working on these problems, and doing what they can to befriend and to understand every unmarried pregnant girl, for instance, who turns up in the Massachusetts General Hospital, to know what is the matter with her. Actual social service began in the Massachusetts General in 1905. We used to make a diagnosis, say they were pregnant or not, as the case might be, and then think that our responsibility had ended. Again it seems to me that it is a case of making a good beginning, but not doing a thorough piece of work. I do not think we have any right to leave a human being stranded after telling them such a fact as that. The most of us know what happens if we do leave them stranded. As they come to us first, the most of them are not of the prostitute class, they are not fundamentally degraded people, they are not very different from the rest of us; but if they are allowed to go on unbefriended, what they do is to have an abortion done, and from that drift down step by step towards or into the prostitute class. It seems to me that it is a case of taking the trouble early, just as we do tuberculosis, before a second misstep has been committed; of making these girls feel that they are not ostracized and shut out of the community, of giving them a chance to bear their children, nurse them, and develop the maternal affection which comes in a vast majority of cases to them if the child is born, although they have looked forward to its birth with terror, and even to work for their child and support it, which

can be arranged perfectly well; and, finally, in many cases to marry, with full knowledge on the part of the husband of all that has gone before. As I was coming here on the train today, I thought of at least a score of girls whom we have befriended in that way, and who are today just as happy mothers of families and as well married as anybody you can think of. I can think of a great many more with whom we made total failures; and, of course, any man who tries to "buck" a difficult problem like that has got to become used to making many failures. But a few successes, it seems to me, outweigh the failures. The problems of venereal diseases in young girls, the problems of young girls who are morally irresponsible, but not yet either diseased or pregnant, present other types of the difficulties that fall under this part of our work. We have been asked often why we do not tackle the much broader problem of venereal disease in men, and we answer that we would if we knew how; but we do not know how. We tackle it as a problem of infectious disease, and try to prevent the spread of contagion. That is all we do because we do not know how to do more. The young girl who comes to a hospital pregnant or diseased wants help. The young man who comes to a hospital diseased does not want help. He wants cure and nothing else, and we have no knowledge as yet how to get any hold on him.

Problems of sick babies and their mothers are pretty obvious, and I do not think need take much time; but this, for example, is what happens in every great hospital that I know anything about, except one or two hospitals in Cleveland. A sick baby comes to the hospital in the summer with stomach and bowel trouble, is taken into the hospital, cured, and then discharged, and no proper instructions given to the mother. The mother feeds the baby just as badly the second time as she did the first, and the baby comes back to the hospital again pretty sick. This process may go on and on indefinitely. The hospital has thrown away its money and the mother and baby have been put to unnecessary suffering. We think it our business, not merely to begin the job well by treating the baby, but to continue the job by educating the mother; and, in the great majority of cases, we find the mothers very eager and anxious to learn, perfectly capable of being taught, but extraordinarily ignorant. This applies not merely to the very poor, but to the fairly well-to-do mother—extraordinarily ignorant. Of course we cannot hide from ourselves the fact that in doing this sort of educational work, we are cutting into the income of the medical profession. I rode in a buggy the other day with a country practitioner, and I was asking him about his practice. He used to have a very extensive practice among children. He said: "I don't see one-tenth as many sick babies now as I used." I said:

"Why not?" He said: "I will tell you why! Things like this happen. Mrs. So and So calls me up over the telephone, and she says, 'Doctor, my baby's stomach and bowels are upset. I have stopped all food. I have given a tenth of a grain of calomel three times. Is there anything else you would recommend? I shall want you to come around and see the baby within twenty-four hours if it isn't any better.' The doctor has to answer that that is about the best he can do, and usually is not called." "Now," said he, "the reason that happens is because I have used that same remedy with previous babies, and taught her those things, and in doing that I have cut some of my own practice away." Yet we have to recognize that we are doing those things, and I do not see how we can stop. I believe the medical profession all over the country today is sawing off the branch it is sitting on by educating the public. Every bit of the educational work we do is cutting into our incomes, and I do not believe we are going to stop. I find that medical men, by doing public health work, detective work of this kind, are diminishing their own income thereby.

Neurasthenic patients, nervous patients, as you, I suppose, do not need to be told, are just as common among the poor, the slum districts of cities, as they are among the rich and luxurious classes. I used to have the idea that neurasthenia was a luxury of the rich, and that the poor could not afford such things; but I have been disillusioned on that point. It seems to me just as common today among the poor as among the rich. It causes a good deal more suffering among the former than among the latter, because it takes the patient away from his work, and causes financial worry and financial suffering, as well as physical. Now all of you have suffered, I suppose, in the attempt to help neurasthenics. I know a good many physicians feel that when a neurasthenic comes in the front door, they would like to run out the back door. They know that one must give him one's spinal cord, so to speak, to do him any good. Any benefit that comes to such a patient must come out of the physician, and the most of us do not like the labor. I think you will also agree with me that, if one will stick to them, there is no class of sufferers that repay labor more. When I think of the cases of chronic heart disease, lung disease and kidney disease that I have treated, and compare them with the neurasthenic diseases, I cannot help observing that the first group I had patched up for a while, but had very seldom put back into the working, wage-earning class; whereas the neurasthenics I have sweat over, and sometimes cursed over, have now and then gone back into full health. If we stick to them, I believe they will repay labor as much as any class there is; but you know, of course, that in hospital practice, with large out-patient clinics, the amount of time and labor that one

has to expend upon this class is not sufficient. You gentlemen, of course, have had this experience: If you see any extra thick, heavy, letters in your mail, containing we will say twenty sheets, you may be sure it is from a neurasthenic before you open it; and their talk is just as long as their letters. But if anybody has, or can hire, the time to talk with them, to understand them, to explain to them what they need to know, and, finally, to re-educate them—and by re-education I mean the re-education of self-control, the control of thought, the control of emotion, the control of appetite and sleep—then one can accomplish a great deal. We have trained up women workers at the hospital to do this work. We do not undertake ourselves to do anything more than make the diagnosis, and then we try to see what we can accomplish through social service workers; and now and then we accomplish a great deal.

The problem of convalescence, especially of surgical patients, is a very serious one; and among the examples that I have been trying to give you of my primary formula of finishing up a good job, there is none that more literally applies than this. I have seen a great many cases of operations on the female genital organs, operations for hernia, operations for piles, and so on, which were just about wasted because the patients had no proper convalescence. I am pretty sure that a good many such operations might just as well not be done, unless the patient can get a proper rest and get a proper chance to build up afterwards; and it seems to me that the rest and building up process, and the reform of habits that often goes with it, is fully as important as the operation itself in many of these cases. The operation itself does some good, but the training of the patient, which you have a chance to do when you control them in a hospital, often accomplishes fully what you need. For example, what a lot of patients there are who think they cannot eat this or that, and who are poorly nourished in consequence. If you take them into a hospital, and do some trifling surgical operation upon them, very likely it does some good—I am rather skeptical about it in some cases—but at any rate the process of re-education that you may carry out in relation to their diet, and their self-control, may do very certain good. I do not go so far in skepticism as some of my surgical colleagues at the Massachusetts General. Dr. Amory Codman, at the Massachusetts General, classes cases of appendicitis in three groups: Appendicitis with abscess, appendicitis with gangrene, and appendicitis for revenue only. (Laughter.) I am not so radical; but I cannot help recognizing that the operation in itself is not always the whole thing in these cases.

Social service departments have sprung up all over this country in the nine years since we started in the Massachusetts General. To-

day I know of 162 social service departments in different parts of this country; but I know of almost none in which they really understand what it is, and what they do not understand they try to use. The Department of Social Service ought to be just like the X-Ray Department,—no more a charity, no more an affair outside of the province of the physician, but a specialty which the physician supports, which he uses, whose results he interprets, and from whose work he gets contributions to his diagnosis and his treatment. When we send a patient to the X-Ray Department, we do not wash our hands of him. We do not turn him over to the X-Ray man and say “You fix up this patient.” We say: “You tell us what you can see, what you can find out, and then we will see what we will do.” That is the way Social Service ought to be used in the hospital. On account of investigation of the home and of the patient’s mentality, which the Social Service worker can carry out, it ought to be used like X-Ray results to contribute to a more comprehensive diagnosis, and to base treatment upon. The treatment given by social workers ought to be controlled and supervised all the time by physicians, exactly as is X-Ray work; but in a vast majority of cases, what happens is something like this: A charitable society, society charities, an outside Nurses’ Association, or something of the kind, thinks it would be a nice thing to have social service in a certain hospital, and they get together some money and employ a worker, with the consent and kindly general interest of some members of the hospital staff; and the social worker goes ahead wholly unconnected with the hospital staff, and just the sort of waste and abuse creeps in that would creep in if you had an X-Ray Department which was in no way related to your staff or responsible to it. The ordinary idea that people get of Social Service is that it has to do wholly with poverty and the relief of need. That is not the way we view it. It is not the idea I have of it in any respect. I think it is just as much needed among the rich as it is among the poor, and it is far more difficult to give. As I look around among my own neighbors in the Back Bay District of Boston, I wish they could have social workers to look after them. I wish I could send to them social workers, exactly as I send them to my hospital patients in the slum districts. They have exactly the same problems of contagious diseases, sex problems, and industrial and hygienic problems, only they are not unravelled by anybody who is competent to do it. Social service, then, has to do with such poverty as interferes with the cure of the disease. When poverty stands between the accomplishment of the doctor’s desires at the present moment, then poverty is a social worker’s job. If you have a case of indigestion, and the patient’s indigestion is due to the fact that he cannot chew his food,

and the fact that he cannot chew his food is due to the fact that he has no teeth, then the social worker's job may be to help provide those teeth; but in the majority of cases it does not mean shelling out so much money, but it generally means hunting around to see who can be found to give that money. What we find in a great majority of cases is something like this: A patient has no money. All right! But he has got relations somewhere who have some money, and he is too proud to ask those relations or is not ready to do so; but if some disinterested person, like a social worker, who knows the facts and has no axe to grind, is ready to go to the relatively rich uncle or cousin, and ask for this money, why the money is forthcoming. A third person is very convenient in cases of that kind.

The origin of the social work which sprang up in the Massachusetts General was my own sense of the inefficacy of my own work. We had been laboring to bring our diagnostic skill up to a high level, and I think we had done fairly well in that respect. We knew exactly what was the matter with the patient, but, when it came to treatment, we were pretty weak it seemed to me. It was a good deal like aiming a cannon by all the modern scientific devices until you found out exactly the point where the enemy was situated, covering it exactly with your aim, and then suddenly taking it into your head to go home to lunch and not fire that cannon. A good deal of the hospital work without social service is like that. We may go through a hard morning's work with an out-patient and make a good diagnosis, but this diagnosis is often perfectly useless because no treatment comparable to the comprehensiveness or accuracy of the diagnosis is forthcoming. I may make a diagnosis of diabetes in a patient who does not complain of any of the ordinary symptoms of diabetes, and perhaps congratulate myself upon it. Then I may say, "You must take such and such diet, and nothing else." In nine cases out of ten ordinary hospital patients that patient cannot possibly buy that diet, and I am adding insult to injury by telling him that he must. He is sick, and that is bad enough, and then a doctor scolds him because he won't do a thing he cannot do. That is what I see going on in hospitals a great deal. After you become aware of the fact that you are telling people to do what they cannot do, it ceases to be very interesting to make accurate diagnoses. We used to feel just the same about consumption. We would pride ourselves on making accurate diagnoses of tuberculosis; but we could not do anything about those cases. They needed rest, fresh air and food. All three of those things cost a lot of money. We would tell a man that he must take perfect rest. I remember scolding a good many men because they would not stop work, not realizing that if they did stop work, and take enough rest, they

would be taking perfect starvation to themselves and their families. Now, in a similar case, we have someone who is ready to take charge and see what the community affords for such a patient. We have sanatoria which do something, and we have visiting nurses at home who do more, and we have resources of one kind and another; so that we do not need to end with diagnoses in these cases, even in advanced cases. While we can do so little in the way of treatment, we can do something in the way of preventing further infection, and that makes our work seem worth while.

A further branch of this work, which the most of us did not think of at all when we started, is assisting the physician by persuading the patient to do what the physician tells him to do. This comes in sight often in relation to operations. A patient comes to a hospital. The doctor says he must have an operation; but you know how often patients fear operations, and how they sometimes feel that doctors are altogether too interested in performing operations. Now, if some perfectly unprejudiced person, like a social worker, can take hold of a patient who is skeptical in this way, and who does not want to be operated on, persuade him that the doctor is not anxious to operate for the sake of operating, persuade him that the thing needs to be done, something can be accomplished.

The mental side of organic disease, not of neurasthenics but of organic diseases, is another thing that seems to me particularly important. I recall a case of a man with locomotor ataxia, who had all the symptoms of the disease, — lightning pains, bladder disturbances, who walked with great difficulty with a cane, who had the Argyll Robertson pupils, and absent knee jerks, and who was down and out; but he was down and out about one-fourth from his tabes and about three-fourths from his mental discouragement. He had been a medical man, had gradually dropped out of medicine, and got to taking both morphine and alcohol. He thoroughly believed that he was no good and never would be any good. Now we could not cure his tabes, and have not done it any good at all; but we have succeeded in persuading him that he can work. We made him stop his morphine and alcohol, and it is perfectly astonishing to see how well that man walks now in spite of his tabes, which is just as bad as it ever was, because he has got those unnecessary loads off his back. The lightning pains of tabes we think a pretty tough symptom. This man had them; but I am not at all sure how much was due to tabes and how much to his lowered or generally poor nutrition. At any rate, his lightning pains disappeared when we got him back to his work and some courage and food into him.

The mental side of organic diseases, the functional side of organic diseases, is the great field where quacks reap their harvest. They take the case when the doctors, as is said, have all given him up. The quack is generally bright enough to know that in most cases of hopeless organic disease there is a functional element, and that functional element can be separated out and treated, and thereby that patient be greatly improved.

In summing up what I have said, as I put it upon the last item on this paper which you have in your hands, it seems to me that a full understanding by any sick patient who is in enough trouble to go to a hospital, involves four things, and that ordinarily we understand in hospital routine only one of those four things. We need to understand his body and his mind, his physical environment and his mental environment. As a rule we get the first and not the other three. Now the investigations of a social worker, as we use them, provides us with these facts; provides us with facts which are just as essential, it seems to me, as any other parts of the history or the physical examination; and in the long run I do not think we are going to be satisfied to treat patients unless we can have at least an outlined knowledge of these facts. And now, ending as I began, I think the general practitioner in relatively small places does know all these four groups of facts about his patients; and, whenever I see cases in consultation with such practitioners, I am always amazed and struck with admiration to see the amount they know about their patients as compared with the little I know about mine. We are apt to hear a good deal, I think, nowadays in dispraise of the general practitioner, and in praise of the so-called scientific laboratory or hospital practitioner, and I think the burden of what I have said to you today has been to impress upon you that this is very far from being true; that the laboratory man, the so-called scientific practitioner, is just as likely to be one-sided and ignorant of vital facts as the man who has not the advantages of laboratories or the latest scientific training, but who does know human nature, his patients, and the details of their lives.

***TWILIGHT SLEEP.**

BY DR. H. E. MILLIKEN, PORTLAND, ME.

McClure's Magazine for June has tossed a bomb into the camp of the obstetricians. It is labelled "made in Germany" from whence so many good things have emanated and some that were not. "Twilight Sleep" or "Dammerschlaf" is the name it bears.

The authors are two women writing in conjunction. Their style is

sufficiently clear to be understood by any intelligent person. Their message is sufficiently plain to be intelligible to the most illiterate.

Painless childbirth is the message, addressed to those who are interested. June, the month of happy bridals, seems an appropriate time for the publishers to bring forth the article.

Heretofore knowledge of this innovation has been spread by word of mouth. According to the writers, one woman delivered to another expectant. Now it is given for the first time to the English speaking public and none need remain in ignorance longer.

Labor or travail, the curse of Eve, shorn of its terrors is to be, according to the noted obstetrician originator of the method, just simple labor, nothing more. Pain is due to that which civilization has introduced, namely a sensitive nervous organization. This element held in abeyance and labor becomes no more distressing than any other day's work well done. In other words, labor to the civilized woman, according to Prof. Kronig may be likened to climbing a mountain with a nail in the sole of the shoe point upwards. Labor under the method he has devised is climbing the same mountain minus the nail.

The Literary Digest and other lay publications have given their readers the benefit of very liberal quotations from this article. "Sensational," "unethical," "reprehensible," "McClure's Mistake," "another Friedman episode about to be perpetrated," "a fake," etc., are some of the more radical salutes to this new comer, from the medical press.

Such an announcement in Germany would excite a mild interest among the people and be referred to the experts for the final verdict. In America, everyone feels himself competent to render an Autocrat of the Breakfast Table opinion of anything that may turn up under the sun, no matter how technical, hence the writer shows himself true to his colors and makes no apology to those who might write more authoritatively.

Let us examine for a moment some of the statements made in the article referred to. "Twilight Sleep" is a method of semi-narcosis produced by the use of certain drugs having the same magical effect as the hasheesh or henbane of the Orientals. The drug which as is hinted made the benign and benevolent Dr. Jekyll into the malevolent and malignant Mr. Hyde has, in this instance the action reversed and the unpleasant and sinister Hyde is converted into the prepossessing and agreeable Jekyll.

*This article is intended to call the attention of the readers of this Journal to the Freiburg method, popularly known as "Twilight Sleep," as abstracted from a lay article and transactions of A Foreign Medical Society meeting at which this method was described by students who have worked in the clinic of Prof. Kronig and is not intended as a discussion of the merits of the method itself.

The process has been perfected in the University of Baden in Freiburg, Germany, by the director of the Frauen Klinik Geheimrat, Professor Kronig and his assistant, Prof. Gauss, a celebrated anæsthetist. The method has been in operation in this clinic for a number of years, nine is the inference, and has been employed in upwards of five thousand childbirths. It is asserted that it banishes all recollections of the pains of childbirth and the testimony of the mothers on this point is unanimous; that the mortality record attributable to the method is nil; that the mortality from all causes has been reduced in the same clinic for both mother and child; that the use of forceps has become far less frequent owing to the fact that in the mother's higher nervous organization, forceps are used at the present time in order to relieve far oftener suffering and shorten labor than for any distinct obstetrical indication, hence infection of the mother and injuries to the child are perceptibly diminished; that the convalescence is rapid, the patient returning calls of congratulation within a week; that no untoward effects are seen from the method in either mothers or children; that travellers from various parts of the earth have visited this clinic, been delivered of their babies, and have returned again and still again to the clinic, showing their appreciation of the method and blessing its originators.

Considerable space is taken up in dealing with the opposition to the method in various parts of Germany and the deductions drawn that the opposition comes from those who do not employ the drugs in sufficient purity, those who do not employ the method correctly, those who are prejudiced against it in advance, and those who do not give their cases their undivided attention, owing to the large clinics and faulty obstetrical organization of their hospitals. It gives the names of many clinics of good standing in which the method is now being employed.

This very well written article could scarcely accomplish less than to enlighten and entertain the reader and to create an interest in the personality and achievements of Professor Kronig and Prof. Gauss.

In the spring of 1913, at a meeting of the surgical section of the American Medical Association of Vienna, the subject of "Twilight Sleep" as carried out by Prof. Kronig of the Freiburg Clinic was taken up and discussed. The method was described in detail by a doctor from Ireland who had spent some months observing the procedure in the Clinic of Freiburg. His remarks were corroborated by two Americans who had likewise each spent several months with Kronig all making obstetrics and gynecology their specialty. The description of the process as given according to the best recollections

of the writer was as follows: morphine and scopolamine were the drugs employed; the method of administration was hypodermic; dosage was, according to the memory of the writer, expressed in terms not unlike the usual doses of these drugs; the two drugs were given both singly and combined, the first dose being the two combined and subsequent doses being usually of scopolamine alone; the end aimed at was to secure a perfect balance between, on one side a degree of narcosis too deep with cessation of uterine contractions, and, on the other, a state so light that the patient would still be conscious of her suffering. This is the crucial point of the Freiburg method.

"Twilight sleep" is obtained by giving certain doses of morphine and scopolamine and repeating at intervals throughout labor. The frequency of repetition is gauged by what is termed the "memory test." The patient has her attention called to some object or some remark is made and later her memory is tested casually in regard to it. If she has forgotten the circumstance the amnesia is satisfactory; if she remembers the scopolamine is repeated. If she remembers having experienced a preceding pain the injection is repeated. Upon the nicety of the amnesia the success of the process depends. The morphine was occasionally repeated once, seldom more, often not at all. The injections of scopolamine were repeated as often as required to blot out the memory of recent events, which might be from two or three to eight or ten times in the progress of a long labor.

It is probable that most physicians are more or less familiar with the use of these two drugs both in combination and singly; as a combination to relieve pain, as a preliminary to general and local anæsthesia; as a powerful sedative to quiet the maniacal in the violent wards of the insane hospitals where it has probably been used more than anywhere else in the past, and all who have done so must of necessity have come to the conclusion that these two particular drugs are not inert, that to a layman their action might indeed seem magical at times and most men have a very wholesome respect and perhaps fear of these powerful agents when in combination or of the hyoscin at all times. However, to argue that because they are powerful drugs they should never be used will excite some controversy at least. We might as well argue that if ether is a powerful drug or chloroform is a powerful drug and that fatalities have at some time occurred even in obstetrics in inexperienced hands their use is never justifiable. At present these and the premature use of the obstetric forceps are all we have to offer to the lying-in woman to assuage her suffering. Therefore let us open our minds to other possibilities and not dispose of the entire subject with the air of

finality that characterizes the writings of some who have never tried the method as described by Kronig or who are unfamiliar with the technique recommended or who will not give the time necessary to insure the success of the measure. Arm chair specialists should not settle every question of medical interest with a few strokes of the pen. Let us have the combined experience of our celebrated obstetricians. What probably interests most medical men is not whether the article purporting to come from an authority so eminent is ethical or unethical but whether or not it is a statement of facts.

Does Kronig do what he claims to do or does he not? Are the statistics that he gives correct or false? Do the child bearing women endorse his claims who have been delivered in his clinic and call him blessed or curse him for a fakir? Will the method work in the hands of other intelligent men? To what extent is it applicable? These all seem to be questions easily open to solution. It would seem that McClure's has a perfect right to call attention to this man and his methods if it chooses. Let us not waste time quibbling about the ethics of the thing. That it is a bonafide article written and published in good faith can not be doubted, that it has been proof-read by these familiar with the technique of the process also can not be questioned. If published at all, a medical article should be technically correct. If the claims are false the results will be serious; trust the Germans to attend to that.

To return to the meeting before mentioned, "twilight sleep" was new to the members present though neither morphine or scopolamine were and many queries were called forth as to dosage, degree of narcosis, behaviour of patient, later testimony of the patient, untoward results on mother and child then or subsequently, complications, necessity for forceps, length of labor, mortality, etc.

Some of the answers by the students of this method were as follows: The uterine contractions under "twilight sleep" remained vigorous and effective: the labor was not appreciably lengthened or shortened as compared with most cases of unassisted labor; behaviour of the mother was often noisy as under light ether narcosis; the memory of the mother as to the severer portion of her labors indistinct or clouded in oblivion altogether; the process required the repeated supervision of the anaesthetist though not necessarily his constant presence at the bedside as in ether or chloroform narcosis; they remarked no serious effects on the mentality of the patients as evinced subsequently; that the memory test and technique were the important things; that no great divergence from that as worked out by Gauss had proven successful; that it was in no wise a secret method but open to all medical men to observe.

These statements made by physicians witnessing this method not once but many times over a period of several months coincide to a remarkable degree with the statements as made by the writers in McClure's, even as to the point that English and American women had been confined in the clinic and had returned again, so well satisfied were they with the conduct of their labors.

Those who fear that all our expectant mothers will now turn their faces toward this new Mecca, especially those of delicate, nervous organization and ample means to whom the article might seem particularly directed, though the latter was not mentioned, may calm themselves with the thought that his method can be transported with no great difficulty to this side of the Atlantic, not being a secret process, and if worthy may be made available to those women who, while their nervous organizations may not be so delicate as to induce them to engage immediate passage to Freiburg, even should their means permit, would be willing perhaps to secure an option on an article of this kind, should occasion require them to decide between Nature's Method and "twilight sleep."

Myths Concerning the Iris of the Human Eye.

A recent book by Boucheny de Grandal brings before us a study of some alleged peculiarities of pigmentation upon the human iris, Amongst the curiosities which he mentions is one in which a physician of Montpellier in France observed upon the iris of the left eye of a young man this odd inscription, "Loue Boit Dieu," "God be Praised," or possibly "Praise be to God." In another instance mention is made of a young French girl named Josephine Louis, who was born in Paris in 1825, and as the daughter of some very poor people was largely exploited in public shows. She exhibited upon the iris of one eye the word "Napoleon," and upon that of the other the word "Empereur." Sir William Wilde, the famous aurist of Dublin makes mention of this young woman, and was very proud to show a portrait of herself which she had given to him. According to Sir William the letters were visible in the lower half of the iris, and were very plainly marked and were due to an unusual arrangement of the radiating and interlacing fibres of this extremely muscular curtain of the eye. Unfortunately, in describing the condition, Sir William calls the structure upon which he saw these letters, the "retina," but we can easily explain this mistake by referring the error to lack of proper proof reading. Daviel, the first to extract cataracts with a long triangular knife, also mentions the case of a girl upon whose iris he plainly deciphered the word "post mortem." And Tenon, from whom we get the Tenon's capsule of the eye, which is in the mouth of every eye muscle operator of today, mentions a woman in whom he saw on one iris a very distinct letter "T." It may additionally be remarked that Tenon caused this oddity to be painted on an enamel, which can be seen to this day in the Dupuytren Museum in Paris.

JOURNAL OF MAINE MEDICAL ASSOCIATION

Editorial Staff.

DR. FRANK Y. GILBERT, MANAGING EDITOR.

DR. C. R. BURR, Portland.

DR. J. A. SPALDING, Portland.

DR. H. E. MILLIKEN, Portland

DR. W. BEAN MOULTON, Portland

County Editors.

DR. S. E. SAWYER, Lewiston.

DR. D. M. STEWART, South Paris.

DR. W. G. CHAMBERLAIN, Ft. Fairfield.

DR. J. B. THOMPSON, Bangor.

DR. HAROLD J. EVERETT, Portland.

DR. C. C. HALL, JR., Foxcroft.

DR. G. L. PRATT, Farmington.

DR. R. C. HANNEGAN, Bath.

DR. A. L. JONES, Old Orchard.

DR. H. W. SMITH, Norridgewock.

DR. WELLINGTON JOHNSON, Augusta.

DR. ADELBERT MILLETT, Belfast.

DR. H. W. FROHOCK, So. Thomaston.

DR. F. R. OBER, North East Harbor

Editorial Comment.

American Medical Association Meeting.

The 65th session just closed, again emphasizes the great work that has been accomplished by organized medicine and we are reminded of the vast amount of work yet to do. The fifteen sections with their papers and discussions have endeavored to place before the profession of the country all newer theories as well as a review of the old, and medals have been given to authors whose work shows the greatest amount of research, serving as a stimulus for better work.

The House of Delegates have placed their stamp of approval on the work done by the various councils and trustees as indicative of the purpose of this great body. The re-election of three trustees to succeed themselves best shows the attitude of the House.

Notwithstanding that the Committee on Arrangements, in their report favored Chicago as the next place of meeting, San Francisco was selected inasmuch as scientific medicine made possible the building of the Panama Canal. At the Panama Exposition of 1915, a definite time will be set aside in recognition of the part played by the medical profession in the great work and it seemed only fitting that this great representative body should meet there.

Maine Medical Association Meeting.

The 62nd annual meeting of the Maine Medical Association in session at Portland, June 10th and 11th, showed a total registration of 249. The attendance at the scientific part of the program, which was held at City Hall, was most satisfactory throughout and proved

conclusively that, notwithstanding the fact that all the papers will be available to readers of the Journal sometime during the year, many men still are interested to hear the essayists first hand and avail themselves of the contact with the personality of the speaker which is denied to readers of the printed page, besides the discussions lend an added attraction and while there are many who favor a clinical session with no papers, this form of meeting has undoubtedly a securely established place at medical conventions.

The annual banquet at the Congress Square Hotel and the clam bake and sail down the bay were social features of the program that were well arranged and as usual well attended.

The House of Delegates reported a business-like session and the best attendance in the history of the Association.

The session throughout was characterized by its business-like precision, the general excellence of the papers and attendance at all the stated meetings.

The Scientific Committee who had the program in charge and the Committee on Arrangements and Entertainment have the reward for their labor of having placed before the Association a program of varied and well sustained interest.

Richard Cabot's address, the annual oration, is printed in this issue. Those who read it will lose some of the pleasure that would have come had they felt the personal magnetism of the speaker in handling the theme that he first introduced and made practical and which remains very near his heart.

The annual banquet coming on the first night of the session was an affair pleasing in every particular as might have been expected with President Peters as toastmaster, who had the opportunity of "blowing first" as he characterized it. Dr. D. A. Robinson and Rev. Mr. Leavitt made clever responses, which were thoroughly enjoyed.

Woods Hutchinson, author, lecturer and physician, was present and brought with him, as was expected, a few of his ideas of modernized medicine which he loosed upon the audience. Dr. Hutchinson has his finger on the public pulse and knows its tension. As the average physician talks to his patient so does Dr. Hutchinson talk to society at large. He believes that the physician instead of losing his influence has been advancing to a plane higher in the public esteem than at any other time in the history of medicine and better still deserves it.

Dr. Gant of New York, celebrated specialist and author, contributed to the scientific session an able paper and to the social evening a whirlwind series of slight of hand performances of a very high order, the technique of which is still a subject for discussion.

Ladies attended the annual banquet in complimentary numbers.

The sail and shore festivities commonly known as the "clam bake" were carried out under ideal weather conditions and this final event of the session proved in all respects the relaxing social affair that is always so well enjoyed by those who like to greet old acquaintances yearly.

The complete program will appear in the August number of the Journal, together with the reports of the House of Delegates and Council.

The President's Address.

We wish to call the attention of our readers to the address of Dr. Wm. C. Peters, the retiring president, which analyzes in a very comprehensive way a matter of great importance to the medical profession. The abuse of medical charity has been under discussion in every State of the Union at some time during the past few years. Dr. Peters not only shows the weak part of this system but gives a solution which is well worth considering.

In the older States, the abuse of charity has developed as the natural consequence of the system under which the general and special hospitals were organized and supervised. The southern and western States have profited by the errors of the East and we find fewer of the so-called private corporations in control of hospitals receiving State aid and a greater tendency to build private hospitals, owned and operated by one or more physicians. In the New England States, particularly Maine, the old system of private corporations is still in vogue. These institutions are controlled by a Board of Trustees composed of successful business men and prominent members of the legal profession, whose source of knowledge concerning hospital affairs is extremely limited and who can only spare sufficient time to attend the meetings of the Board. It would seem wiser if the Board of Trustees were composed of medical men who had served their term as hospital intern, assistant, and finally chief of service and retired from active duty on the staff.

A body of business men will naturally deal with hospital problems in a business manner and it is extremely difficult in many cases to make them fully realize that the position of the medical staff is not similar to a paid employee in their own office. Moreover, the loose system under which most of our institutions are operated in its admission of patients lays the physician and surgeon open to many unjust criticisms. It is quite a common experience on the part of surgeons to find patients admitted to hospital service, stating that they could pay for their operation but did not understand that they

were receiving free medical and surgical treatment. If it were explained to them that the \$2.00 a day paid merely for board and nursing and that the medical and surgical services were free, there would be fewer applicants, as they can readily see that if they went to a hotel and paid a per diem rate and, in addition, called a physician to attend them in sickness, they would expect to pay for services rendered. Our hospitals not only supply board and lodging at a less per diem rate than our hotels but nursing as well.

We agree most heartily with Dr. Peters in his statement that these institutions should be for the poor and that some system of investigation should be carried out to determine the financial condition of applicant. It would be unreasonable to assume that a man, earning nominal wages and supporting a family, including two or more children, could afford hospital treatment in case of illness, lasting even over short periods. On the other hand, a single man, working at a trade, should be expected to pay for medical services in the same manner as he expects to pay for clothing, merchandise, legal and dental expenses, and any institution, depending on the services of the medical profession, should take this matter in consideration. It is not wholly a matter of the physicians' livelihood but involves another and more serious question, namely the training of these people to expect free medical and surgical treatment, which is only a stepping stone to attempt to secure free dental, legal, and other services, omitting to pay all their bills.

Two years ago a State Committee, composed of representatives from each of the county societies, met in Portland and discussed this subject at length. This committee finally recommended that the matter be sent back to the county societies for discussion and offered the following recommendation: "That it be the sentiment of the medical profession that hospitals shall not admit to private rooms patients receiving free medical and surgical services."

The staff at one of our large general hospitals had secured the opening of the doors of the institution to all reputable men in the community and were endeavoring to close the private rooms to all charitable cases where the matter came under the consideration of the committee in response to the suggestion of the member and the above recommendations were incorporated in the report. These measures have been successfully tried out in many institutions over the country and were strongly urged by the representatives from that community. We sincerely hope that the new State Board of Charities and Corrections will give this matter careful attention and gradually reach a solution satisfactory to all concerned.

We most heartily commend the brief summary in Dr. Peter's paper. The matter of a new medical registration law is in the hands of an efficient committee with power to act. We firmly believe they will work out a solution satisfactory to the majority of the members of this Association.

The question of a State Hospital for the poor tuberculous patient is certainly a matter which should receive the careful attention of the legislature from a purely economical standpoint and all tax payers would naturally be interested in such a move. In this day of preventive medicine it would seem one of the greatest subjects.

Dr. Cabot's Oration.

When we read this admirable piece of instruction in Social Medicine printed elsewhere in the current issue of the Journal, we can only remain for a while silent in thought, and wish then to ourselves that we might hear more like it at every meeting of our Association. Furthermore we find ourselves wishing for the ability and the art so to marshal our thoughts and arguments on any topic, as to obtain for an hour that steady, watchful attention observed during the reception of this oration.

How often have we ourselves talked to patients in the hospitals and felt how pitiful it was that so many chances for doing good to them, otherwise than by medicine and surgery, were overlooked. How few of us ever think of talking man to man to our patients in the wards. How often we have asked a patient, not our own, how he was getting on, and had from him the answer that: "The doctor never tells me." How often we ask for even the name of the disease from which the patient is suffering and we learn that: "The doctor never tells us; we do not know; he comes, looks at us and goes; the only encouragement that we ever hear is that we have to stay more weeks or more months." How few of us ever think as Dr. Cabot here bravely urges us to do, of inquiring about the personal surroundings of our patients after they have left a hospital. How much we look for diagnosis, how little at the daily environments of humanity. Yet these influence permanent recovery. The gospel of cheerfulness has been preached too little by physicians. The name of a disease has occupied our minds, when we should have paid more attention to its outcome, and its final effect on the personality of the patient, his future and his family.

For centuries we have been struggling forward as a profession and we are daily congratulating ourselves on the really enormous progress which we have been making in many directions, yet here

comes before us a man who tells us plainly that we are yet on the threshold only, of the permanent cure of disease; our permanent results are far from reached when we dismiss a patient from his bed in the hospital or at his own home, as actually cured, and totally free from chances of relapse. For these are all too common, and too frequent, and the fault lies largely with ourselves, or with our teachings, because we fail to follow up our patients when we let them go as cured. We have failed because we have not induced the social workers to help us out in this direction to the improvement of humanity. Never till now have we been so plainly taught that it is an added duty, to those that already weigh down heavily upon our minds and our time, to bring about more permanent cures and to prevent relapses by asking others to help us.

From the writer of "What Men Live By," we had expected something worth listening to for even longer than he chose to speak, and we have not been in the least disappointed in every word that he had to say to us. All too soon he ceased his lessons of instruction, and therefore let us hope for farther teaching in this same direction of thought from his pen, or by word of mouth on some later occasion.

Pure Water.

Residents supplied with water by the Portland Water District should read the report of the trustees for the year ending Dec. 31, 1913. That part relating to sanitation makes particularly interesting reading for physicians.

It appears that considerable land on the shores of Lake Sebago has been bought and paid for; many cottages removed and their premises cleared. A substantial, closely woven galvanized wire fence with steel posts now encloses the land acquired by the district and extends from the Maine Central Railroad to the Lakehurst property, a distance of one and one-half miles. This fence makes it difficult or impossible for picnic or automobile parties to get near the shore of the lake. Hitherto such parties have had ready access to the shore of the lake and have been a source of danger. Moreover, under the law of 1913, bathing in the lake has been prohibited within two miles of the intake.

As to the water itself, it has regained much, if not all, of its old sparkle and taste. This is in great part due to the installation at the lake of an up-to-date plant for the hypochlorite treatment of the water. The spring and fall freshets make their presence known by a certain amount of turbidity and it was considered advisable to try the hypochlorite process, although the daily examination of the water showed

no necessity for its continued use. At present, it will be operated during the spring, summer and fall months.

Prof. James M. Caird of Troy, N. Y., has been in charge of the protection of the water supply. Under his direction, daily tests of the water have been made, the total number for the year being nearly 5,000.

Appreciation of the work of our colleague, Dr. W. S. Thompson, chairman of the Board of Health of Standish, is expressed by the trustees for his "invaluable assistance in the regulation of all questions raised by the cottage owners as to the disposal of waste and drainage."

New and Non-Official Remedies.

Since publication of *New and Nonofficial Remedies*, 1914, the following articles have been accepted for inclusion with "N. N. R." Those accepted during the current month are made prominent by the use of capitals.

H. M. Alexander & Co.: Normal Horse Serum; Typhoid Vaccine, immunizing.

Antiseptic Supply Co.: Causticks; Caustick Applicators; Cupricsticks; Stypticks.

Arlington Chemical Co.: ARLO UREASE.

Comar and Cie: ELECTRARGOL.

Farbwerke Hoechst Co.: Amphotropin; Erepton.

Fairchild Bros. and Foster: Trypsin.

Franco American Ferment Co.: LACTOBACILLINE TABLETS; LACTOBACILLINE LIQUIDE, CULTURE A; LACTOBACILLINE LIQUIDE, CULTURE D; LACTOBACILLINE LIQUIDE, INFANT CULTURE; LACTOBACCILLINE GLYCOGENE TABLETS; LACTOBACILLINE (GLYCOGENE LIQUIDE); LACTOBACILLINE MILK TABLETS; LACTOBACILLINE MILK FERMENT; LACTOBACILLINE SUSPENSION.

Hoffman-LaRoche Chemical Works: Thiocol; Syrup Thicol, Roche; Thiocol Tablets.

Hynson, Westcott & Co.: Phenolsulphonephthalein, H. W. & Co.; Phenolsulphonephthalein Ampules, H. W. & Co.

Merck & Co.: Cerolin.

H. K. Mulford Co.: Acne Serobacterin; Anti-Anthrax Serum, Mulford; Antistreptococcus Serum Scarlatina, Mulford; Coli Serobacterin; CULTURE OF BULGARIAN BACILLUS, MULFORD; Disinfectant Krelas, Mulford; Neisser Serobacterin; Pneumo Sero-

bacterin; Salicylos; Scarlatina Strepto Serobacterin; Staphylo-Serobacterin; Straphylo Acne Serobacterin; Strepto-Serobacterin; Typho-Serobacterin.

Riedel & Co.: New Bornyval.

Reinschild Chemical Co.: Phenolphthalein Agar.

E. R. Squibb & Sons: Sodium Biphosphate, Squibb; Tetanus Antitoxin, Squibb; TETANUS ANTITOXIN. SQUIBB, 5,000 UNITS.

Wm. R. Hubbert: Diphtheric Antitoxin, Hubbert. Having been advised that Diphtheric Antitoxin, Hubbert was no longer on the market, the Council directed that it be omitted from future editions of new and nonofficial remedies.

Riedel & Co.: Hexalet. At the request of the manufacturer, the name Hexal in New and Non-official Remedies has been changed to Hexalet.

Propaganda for Reform.

Valentine's Meat Juice.—Four years ago, an examination by the Council on Pharmacy and Chemistry showed that Valentine's Meat Juice was not a meat juice, but had the character of a meat extract instead, while on the basis of the claim that it was a meat juice, extravagant assertions as to its nutritive value were made. The product being a meat extract, was practically devoid of nutrient qualities. As Valentine's Meat Juice is still widely advertised, the Council deemed a re-examination important. This re-examination shows that in general it has the composition now as then, and that the same unwarranted claims are still made for it. (Jour. A. M. A., May 2, 1914, p. 1419.)

Pituitary Extract.—The use of pituitary extract as an oxytotoxic must be considered in the experimental stage. A large number of cases have been reported in which untoward effects from the use of various pituitary extracts (including pituitrin) were obtained. (Jour. A. M. A., May 2, 1914, p. 1420.)

Pancreatin.—Long and Huhleman report that mere traces of hydrochloric acid will destroy the ptyalin of pancreatin, that pancreatin of commerce—which often is not pancreatin but merely the dried pancreas gland—is practically devoid of lipase, the fat digesting ferment, and that its tryptic ferment is likely to be destroyed by the action of the pepsin and hydrochloric acid during its passage through the stomach. (Arch. Int. Med., Feb., 1914, p. 314.)

The Okola Laboratory.—The postmaster general has issued a fraud order against the Okola Laboratory, Inc., Rochester, N. Y., which sold a mail order treatment for weak eyes. The "laboratory" advertised that Dr. John L. Cornish, "an able New York physician" and "an eminent medical man" had discovered a marvelous treatment for affections of the eye by which those who were wearing glasses or who should have been wearing glasses would do without them. The treatment consisted of three parts. Okola was the name of some tablets proven by the government to consist of baking soda and boric acid. The Okolator was a metal inhaler containing cotton moistened with a

volatile liquid. The Okolizers were printed cards giving instructions for rubbing the eyes, etc. (Jour. A. M. A., May 9, 1914, p. 1492.)

Pa-pay-ans (Bell) now Bell-ans.—Bell & Company announce that Pa-pay-ans (Bell) is in the future to be known as Bell-ans. An examination of Pa-pay-ans (Bell) made by the Council on Pharmacy and Chemistry having failed to demonstrate the presence of papain, it is probable that the change of name was decided on to escape prosecution for misbranding. (Jour. A. M. A., May 9, 1914, p. 1492.)

Bromidia (Battle and Co.)—A report of the Council on Pharmacy and Chemistry points out that while the name suggests bromid, bromidia is essentially a chloral preparation. This nostrum illustrates the need of the Council's rule under which recognition is refused to pharmaceutical mixtures whose name does not indicate their most potent ingredients. While the chloral content of bromidia has been given considerable publicity, yet the preparation is used both by physicians and by the public, without due consideration of its potent ingredient, as attested by the fatal results and the habit-formation which have resulted from its use. The bromidia advertising propaganda first admits the presence of chloral, then it is argued that in bromidia the evil effects of chloral are eliminated and in the end the impression is left that bromidia is practically innocuous and may be given even in cases of typhoid and to children. (Jour. A. M. A., May 16, 1914, p. 1573.)

Monte Cristo Rum and Quinin for the Hair.—The government chemists found this preparation to contain ethyl alcohol, wood alcohol and a trace of quinin. The manufacturers were found guilty of adulteration and misbranding the preparation. (Jour. A. M. A., May 16, 1914, p. 1575.)

Pepsin Magen Bitters.—The government chemists found this preparation to contain only a trace of pepsin. The preparation was declared misbranded. (Jour. A. M. A., May 16, 1914, p. 1575.)

Bavarian Malt Extract.—The government chemists proved that this was not a malt extract coming from Bavaria, but instead was beer. The product was declared misbranded. (Jour. A. M. A., May 16, 1914, p. 1575.)

Thiocol Re-admitted to N. N. R.—In 1913, the Council on Pharmacy and Chemistry directed the deletion from New and Non-official Remedies of Thiocol and Syrup Thiocol, Roche, because a preparation called Sirolin, containing Thiocol as its effective component and practically the same as Syrup Thiocol, Roche was being advertised to the public. The Hoffman-LaRoche Chemical Works having furnished assurance that the public exploitation of Sirolin has been discontinued, the Council voted that Thiocol and Syrup Thiocol, Roche be restored to New and Non-official Remedies. (Jour. A. M. A., May 23, 1914, p. 1637.)

Antimeningitis Serum.—The untoward or fatal effects sometimes following the use of antimeningitis serum are probably due to the toxic action of the preservative contained in it or to increased intracranial tension due to its administration. The technique of its employment should be improved rather than its use abandoned. The dangers which may arise from its use are not to be feared as much as the disease itself. (Jour. A. M. A., May 23, 1914, p. 1661.)

Liquid Petrolatum or "Russian Mineral Oil".—A report of the Council on Pharmacy and Chemistry points out that petroleum oil was used as a medicine by the ancients and that the product "liquid petrolatum" is now on the market under a host of proprietary names and is official in most pharmacopœias.

It was at one time used in the treatment of tuberculosis and as an adulterant of fats and oils on the assumption that it was assimilable. It is now known to pass the system unchanged and has recently been highly lauded as a particularly harmless laxative in the treatment of habitual constipation. As the U. S. P. definition of liquid petrolatum permits the use of rather widely varying products and as there is some difference of opinion whether a light or a heavy oil is preferable, the Council recommends that physicians desiring the water white, non-fluorescent (Russian) mineral oil use the term *petrolatum liquidum* grave or *paraffinum liquidum*, B. P. if the heavy product preferred by Sir F. Arbuthnot Lane is desired and *petrolatum liquidum laeve* if the light variety is desired. (Jour. A. M. A., May 30, 1914, p. 1740.)

Cirkulon.—The device "Pulsocon" which Gerald Macauro has exploited widely in England, is sold in this country as "Cirkulon" by the "Cirkulon Institute" of Kansas City, Mo. Gerald Macauro, according to the Associated Press, has been sentenced in France to serve a term of three years' imprisonment on a charge of fraud. (Jour. A. M. A., May 30, 1914, p. 1742.)

Abstracts of Current Literature.

(A. M. A. Journal, Feb. 21, 1914.)

The Dorsal Position during the Puerperium as a Cause for Retroversio Uteri.

By DR. W. C. GAYLER, ST. LOUIS.

In this interesting paper, Dr. Gayler states that the above causative factor in retroversion of the uterus has been scarcely mentioned in papers on this subject, and he deprecates the ignorance shown in this matter.

Parenthetically speaking, I might say that this is but a revival of a long known etiological fact but it is of such interest and value that it will stand repetition.

It is stated that in the classification of causes for this mechanical abnormality that first, — congenital lack of ligamentary tone throughout the body is to be considered.

Secondly, — Pelvic inflammatory trouble with adhesions.

Thirdly, — Extreme distention of bladder and rectum pushing cervix forward and fundus backward.

To these three causes, Dr. Gayler adds the "dorsal position during the puerperium."

The author, after citing physiologic activities of the puerperal uterus, gives the following conclusions.

He thinks that we are seldom justified in allowing the recently delivered woman to assume the dorsal position. He says that the uterus is larger and heavier than at any other time in the life of the woman. The ligaments have not undergone involution, and cannot

support the uterus. Bladder distention is probable. Dr. Gayler would ask that a woman assume the right or left side bodily position or occasionally the flat abdominal position. He says that this is logical and capable of fulfilment for eight days. In short, prohibition of the dorsal position always in the puerperium unless there is some interference of the lochial discharge.

A. P. L., JR.

(American Journal of Obstetrics.)

Caesarean Section. A Study of a Consecutive Series of Cases

BY ASA B. DAVIS, M. D., N. Y. CITY.

In this paper, Dr. Davis presents the results of 193 cases of Cesarean Section. He also describes at length, the indications for this operation, stating the most favorable time and clearly discusses the entire technique for same.

He emphasizes the point that pains-taking pelvimetry is a most important guide in every case of pregnancy.

Contracted pelvis is with him the main indication for Section, but he states that the following conditions have necessitated Cesarean Section in addition.

Unduly large children; accidental hemorrhage; impacted face; after ventral suspension; tonic uterine contraction; placenta previa; eclampsia; prolapse of the umbilical cord; neoplasms obstructing the birth canal; atresia of the vagina.

Dr. Davis does not advocate sterilization of the patient, but on the other hand states that he has performed this operation from two to six consecutive times on a given patient.

Rupture of the uterus in labour following Cesarean Section has happened to three of the patients in the aforesaid number. The most favorable time for the Section is a few days before term and before the onset of labour. No cervical dilation is needed. Dr. Davis advocates the supra umbilical incision. The operation is leisurely done, not hurried. The uterine wound is closed by two layers of sutures. The deep layer is closed with No. 2 chromic gut and the outer layer with No. 1 chromic gut. The whole operation was described in detail but to such an extent as to preclude any decent extract of description.

Dr. Davis finds the following advantages in the use of the small median incision entirely above the umbilicus.

1. There is no danger of adhesions between the uterine and the abdominal wounds and the uterus is therefore allowed to involute normally and take up its position in the pelvis without restricted mobility.

2. In the midline the abdominal wall is very thin and no important structures are divided. The tissues are elastic and a small opening is needed only for the delivery of the child. The small abdominal opening offers much less chance of the escape of intestine

and omentum, and obviates the need of handling the abdominal contents. Located above the umbilicus there is much less probability of the occurrence of hernia.

A. P. L., JR.

(New York State Journal of Medicine, February, 1914.)

Camphor in Pneumonia.

By Wm. J. Cruikshank, M. D.

The mortality records from the middle of the 19th century until today show no decrease in the death rate in pneumonia. It still remains 20 - 30%. "Fifty years of orthodox expectancy in the treatment of pneumonia has accomplished nothing toward reducing its mortality," and "up to the present time neither serum or vaccine therapy has accomplished anything definite."

Large doses of camphor were first used in the treatment of pneumonia by Seibert of N. Y. Polyclinic. 36 cases were reported by him in 1912 with only one death. The fatal case was that of a man 68 years old, weighing over 200 pounds, with a fatty heart and double pneumonia. "The camphor injections invariably reduced the toxemia gradually until practically normal conditions were reached three or four days after the first injection, while the alveolar exudate remained to be absorbed later on. This phenomenon and the absence of crisis were notices in every case."

"The blood culture work of the last decade has shown (1) that the pneumococci enter the blood (in pneumonia) at the time of the initial chill, in fact cause it; (2) that they remain there until after the crisis; and (3) that they cause the toxemia, the life danger, and, in fatal cases, the death of the patient."

Camphor therapy is directed against the pneumococci in the blood where its growth is markedly diminished and hence the toxemia is lessened. Experimental work on animals and clinical observation has shown "(1) that 10 c. c. of 30% camphorated oil (equal to 36 grains of pure camphor) injected hypodermically to 100 lbs. human body weight every 8 to 12 hours does not produce symptoms of poisoning, in fact is harmless; (2) that much larger doses (to body weight) in rabbits are equally well borne; and (3) that these quantities of camphor materially assist in overcoming pneumococci toxemia; and (4) that the earlier this treatment is resorted to, the better the results."

In discussing the paper, Dr. Seibert adds: "Camphor should neither be relied upon as a cardiac stimulant nor feared as a toxic agent in the doses" employed by us. Camphor markedly reduces nervous irritability, particularly in alcoholics. Paessler states that the good effect of camphor on a weak circulation is due to irritation of vaso-motor centers. The reports of the effects of camphor on animals receiving a lethal dose of pneumococci are convincing.

Perhaps the most interesting is the following:—

"(1) Of the animals injected with camphor during 3 days prior

to a fatal pneumococcic injection, two-thirds remained well and survived.

(2) Of the animals given 0.45 c. c. of antipneumococci serum, 3 hours before infection, 2.3 remained well, and $\frac{1}{3}$ were sick for 3 days but recovered.

(3) Of the animals given antipneumococci serum and camphor oil before the infection, *all remained well.*"

Seibert likens the early use of camphor in pneumonia to the early use of antitoxin in diphtheria and suggests that sterile camphor in oil as well as antitoxin should be in the outfit of every physician.

C. M. R.

County News.

KENNEBEC.

Kennebec County Medical Society held a quarterly meeting at Augusta House, June 3, at 7 P. M. A banquet was enjoyed, after which Dr. Cotton of Boston gave an illustrated lecture on "Fractures and How not to Treat Them." The paper was interesting and profitable to all present. There were 32 in attendance.

WELLINGTON JOHNSON,

County Editor.

YORK.

The 77th quarterly session of the York County Medical Society was held at "The Wayland," Dunstan Village, Searboro, Friday, June 26. A business meeting was held from 12 to 1 o'clock, Dr. J. W. Gordon, presiding. The minutes of the April meeting were read and approved. Dr. Wm. H. Baker, Bowdoin Medical, '01, of West Buxton, was elected to membership. Some other matters were presented, and at 1 o'clock, there was adjournment for dinner. The clams, lobsters and other edibles were excellent and served in a very satisfactory manner. This was the annual "ladies' day" of the Society and there was a good attendance, the weather being ideal.

Those present were: Dr. and Mrs. E. C. Cook, York Village; Dr. and Mrs. B. F. Wentworth, Scarboro; Dr. and Mrs. F. C. Lord, Kennebunk; Dr. and Mrs. A. S. Davis, Springvale; Dr. and Mrs. W. E. Lightle, No. Berwick; Dr. and Mrs. S. B. Marshall, Alfred; Dr. and Mrs. R. S. Gove, Sanford; Dr. and Mrs. D. W. Wentworth, Sanford; Dr. and Mrs. W. W. Smith, Dr. J. W. Gordon, Ogunquit; Dr. H. P. Ilsley, Mrs. Grover, Limington; Dr. and Mrs. F. R. Stamp, Dr. W. W. Varrell, York Harbor; Dr. and Mrs. L. L. Powell, Dr. and Mrs. R. L. Maybury, Saco; Dr. and Mrs. E. D. O'Neill, Dr. and

Mrs. C. F. Kendall, Dr. and Mrs. D. E. Doloff, Dr. and Mrs. E. J. Emery, Dr. F. E. Small, Dr. F. B. Wheaton, Dr. Grace E. Wheaton, Dr. J. M. O'Connor, Miss O'Connor, Biddeford; Dr. S. J. Bassford, Portland; Mrs. Helen M. Dolley, Dr. and Mrs. A. L. Jones, Old Orchard. Total, 45.

A. L. JONES, *County Editor.*

Personal News and Notes.

Dr. J. L. M. Willis of Eliot has been recently elected to the New England Federation of Examining and Licensing Boards. The next meeting will be held in Hartford, Conn.

Among the Maine men to attend the American Medical Association meeting at Atlantic City were the following: Drs. D. A. Barrell, Auburn; W. H. Hawkins, Lewiston; L. L. Hills, Westbrook; E. G. Abbott, W. H. Bradford, J. W. Bowers, W. L. Cousins, F. Y. Gilbert, E. E. Holt, A. W. Haskell, E. E. Holt, Jr., O. P. Smith and H. F. Twitchell, Portland.

Dr. and Mrs. E. D. O'Neill, Biddeford, sailed from New York the first week in July for a trip to France and England. They will be away about two months. They have crossed the Atlantic Ocean several times.

Dr. L. A. Girard of Biddeford has taken a cottage on Pearl Ave., Old Orchard, for the summer.

= = WANTED = = **OCULISTS' PRESCRIPTION WORK.**

We offer the facilities of a large shop.
Every order receives the personal attention of one of the firm.
Only the best of material is used and we never substitute.
The small orders are appreciated as well as the large.
A trial will convince you of our accuracy and promptness.

THE SMITH-SOMES CO.

... OPTICIANS ...

578 Congress Street,

Opp. Congress Square Hotel

FOR SALE

Old established country practice. Exceptionally good opportunity for any one wishing to locate in the country.

Address C. M.,

Care Maine Medical Journal



THE JOURNAL

OF



THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 2

SEPT., 1913.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

The President's Address.....	1501
The Value of Preoperative Study in Major Genito-urinary Surgery.....	1508
The Alcoholic Psychoses.....	1516

A Cardiac Sign in Cancer.....	1536
-------------------------------	------

Dr. Usher Parsons — U. S. N.....	1537
----------------------------------	------

Editorial Comment—

President's Address	1532
Fee Splitting Bill.....	1533
Iowa City on Fee Splitting.....	1534
Lodge Practice.....	1535
The Meaning of the Termination "Pathy"	1535
Motor Car Electric Head Lights.....	1536

Necrology—

Charles Wallace Price.....	1539
William Cowie	1540
Edward Marina Small.....	1540

Corrections on Vol. IV, No. 1.....	1541
Review of Current Literature.....	1542
Book Review.....	1543
Personal News and Notes.....	1544

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.

Vice Pres.:—First, Eben Marston, Bath.

Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.

Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,

" " "

" " 1914,

" " "

" " 1916,

" " "

J. D. Cochrane, Saco,

E. S. Cummings, Lewiston,

G. H. Coombs, Waldoboro,

G. R. Campbell, Augusta,

S. E. Webber, Calais,

T. S. Dickison, Houlton,

First District.

Second District.

Third District.

Fourth District.

Fifth District.

Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.

Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.

W. L. Haskell, Lewiston,
Frank Kilburn, Presque Isle,
E. E. Holt, Portland,
B. F. Makepeace, Farmington.
Frank R. Ober, Northeast Harbor,
S. J. Beach, Augusta,
B. F. Adams, Rockland,
F. E. Wheeler, W. Paris,
H. T. Clough, Bangor,
N. H. Crosby, Milo,
I. C. Irish, Bowdoinham,
W. S. Milliken, Madison,
A. E. Kilgore, Brooks,
J. R. N. Smith, Milltown,
L. E. Willard, Saco,

Secretary.

S. E. Sawyer, Lewiston.
W. G. Chamberlain, Fort Fairfield.
Philip P. Thompson, Portland.
G. L. Pratt, Farmington.
Geo. A. Neal, Southwest Harbor.
H. W. Miller, Augusta.
H. W. Frohock, So. Thomaston.
D. M. Stewart, South Paris.
J. B. Thompson, Bangor.
R. H. Marsh, Guilford.
R. C. Hannegan, Bath.
H. W. Smith, Norridgewock.
Adelbert Millett, Belfast.
H. B. Mason, Calais.
A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the 15th, for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM

FOR OPEN AIR AND REST TREATMENT

EAST PARSONSFIELD, MAINE

Portland, Address:
608 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.

BOSTON MEDICAL LIBRARY
FEB 11 1914

THE JOURNAL



Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 3

OCT., 1913.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

- Conservative Treatment of Compound Fractures. By Dr. Hiram Hunt, Greenville, Me..... 1545
- Radical Treatment. By Dr. W. C. Peters, Bangor, Me. 1550
- The Treatment of Fractures with Lane Plates. Dy Dr. A. D. Sawyer, Fort Fairfield, Me..... 1553
- The Use of the X-Ray in Fractures. By Dr. F. W. Lamb, Portland, Me. 1558

Editorial Comment—

- The Pulmotor and the Respirator.... 1567
- An Official Organizer 1568

- Co-operation among Physicians..... 1569
- Board of Health, City of Portland, Me. 1570

Necrology—

- Joshua William Beede..... 1571
- Augustus Marverick 1572
- Ambrose Herbert Weeks..... 1573

-
- Book Reviews 1575
- County News 1577
- Personal News and Notes..... 1580
- Society News and Notes..... 1580
-

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.

Vice Pres.:—First, Eben Marston, Bath.

Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.

Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,

" " "

" " 1914,

" " "

" " 1916,

" " "

J. D. Cochrane, Saco,

E. S. Cummings, Lewiston,

G. H. Coombs, Waldoboro,

G. R. Campbell, Augusta,

S. E. Webber, Calais,

T. S. Dickison, Houlton,

First District.

Second District.

Third District.

Fourth District.

Fifth District.

Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.
Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.

W. L. Haskell, Lewiston,

Frank Kilburn, Presque Isle,

E. E. Holt, Portland,

B. F. Makepeace, Farmington,

Frank R. Ober, Northeast Harbor,

S. J. Beach, Augusta,

B. F. Adams, Rockland,

F. E. Wheeler, W. Paris,

H. T. Clough, Bangor,

N. H. Crosby, Milo,

I. C. Irish, Bowdoinham,

W. S. Milliken, Madison,

A. E. Kilgore, Brooks,

J. R. N. Smith, Milltown,

L. E. Willard, Saco,

Secretary.

S. E. Sawyer, Lewiston.

W. G. Chamberlain, Fort Fairfield.

Philip P. Thompson, Portland.

G. L. Pratt, Farmington.

Geo. A. Neal, Southwest Harbor.

H. W. Miller, Augusta.

H. W. Frohock, So. Thomaston.

D. M. Stewart, South Paris.

J. B. Thompson, Bangor.

R. H. Marsh, Guilford.

R. C. Hannegan, Bath.

H. W. Smith, Norridgewock.

Adelbert Millett, Belfast.

H. B. Mason, Calais.

A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the 15th, for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM

FOR OPEN AIR AND REST TREATMENT

EAST PARSONSFIELD, MAINE

Portland, Address:
608 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.

EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.

BOSTON MEDICAL
FEB 11 1914
LIBRARY

THE JOURNAL



Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 4

NOV., 1913.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

- The Eye: Its Connection with Diseases and Injuries of the Body..... 1581
- The Role of the Nose, Throat and Ear to General Diseases..... 1588
- The Etiology of Goiter..... 1597

Editorial Comment—

- An Open Air School for Tuberculosis Children and Its Cost..... 1603
- Vermont Medical Society..... 1604
- Open Air or Open Window Schools for Tuberculosis Children..... 1605

- The Vision of Aviators..... 1606
- Esperanto in Medical Germany..... 1607
- The Correspondence School System of Educating Trained Nurses..... 1608

Necrology—

- Edwin Motley Fuller..... 1611

-
- County News 1613
- Personal News and Notes..... 1616
- Book Review 1616
-

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.

Vice Pres.:—First, Eben Marston, Bath.

Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.

Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,
" " "
" " 1914,
" " "
" " 1916,
" " "

J. D. Cochrane, Saco,
E. S. Cummings, Lewiston,
G. H. Coombs, Waldoboro,
G. R. Campbell, Augusta,
S. E. Webber, Calais,
T. S. Dickison, Houlton,

First District.
Second District.
Third District.
Fourth District.
Fifth District.
Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.
Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.
W. L. Haskell, Lewiston,
Frank Kilburn, Presque Isle,
E. E. Holt, Portland,
B. F. Makepeace, Farmington,
Frank R. Ober, Northeast Harbor,
S. J. Beach, Augusta,
B. F. Adams, Rockland,
F. E. Wheeler, W. Paris,
H. T. Clough, Bangor,
N. H. Crosby, Milo,
I. C. Irish, Bowdoinham,
W. S. Milliken, Madison,
A. E. Kilgore, Brooks,
J. R. N. Smith, Milltown,
L. E. Willard, Saco,

Secretary.
S. E. Sawyer, Lewiston.
W. G. Chamberlain, Fort Fairfield.
Philip P. Thompson, Portland.
G. L. Pratt, Farmington.
Geo. A. Neal, Southwest Harbor.
H. W. Miller, Augusta.
H. W. Frohock, So. Thomaston.
D. M. Stewart, South Paris.
J. B. Thompson, Bangor.
R. H. Marsh, Guilford.
R. C. Hannegan, Bath.
H. W. Smith, Norridgewock.
Adelbert Millett, Belfast.
H. B. Mason, Calais.
A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

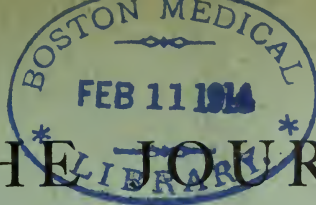
All news items, case reports, etc., must be had by the 15th, for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM FOR OPEN AIR AND REST TREATMENT EAST PARSONSFIELD, MAINE

Portland, Address:
698 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.



THE JOURNAL



OF

THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 5

DEC., 1913.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

Artificial Pneumothorax	1617
Abstract from Proceedings of Mental Hygiene Conference, New York, Nov. 8-15, 1912.....	1635
"Football and Physical Efficiency,"	1639

Preventive Vaccination against Typhoid in French Navy.....	1646
Poisoning from Corrosive Sublimated Tablets	1646
International Medical Congress, Aug., 1913	1647

Editorial Comment—

Autopsies	1641
Artificial Pneumothorax	1643
Clinical Congress of Surgeons.....	1644
American College of Surgeons.....	1645
County News and Notes.....	1645
Goiter	1646

Necrology—

Arthur Adelbert Downs, M. D.....	1648
----------------------------------	------

Medico-Legal	1650
Book Reviews	1654
County News	1657
Personal News and Notes.....	1660

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor. Secretary:—J. B. Thompson, Bangor.
Vice Pres.:—First, Eben Marston, Bath. Treasurer:—E. W. Gehring, Portland
Second, C. T. Emery, Biddeford.

BOARD OF COUNCILORS.

Term expires 1915,	J. D. Cochrane, Saco,	First District.
" " "	E. S. Cummings, Lewiston,	Second District.
" " 1914,	G. H. Coombs, Waldoboro,	Third District.
" " "	G. R. Campbell, Augusta,	Fourth District.
" " 1916,	S. E. Webber, Calais,	Fifth District.
" " "	T. S. Dickison, Houlton,	Sixth District.

CONSTITUENT COUNTY SOCIETIES.

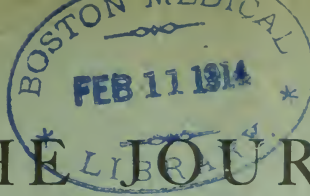
County.	President.	Secretary.
Androscoggin,	W. L. Haskell, Lewiston,	S. E. Sawyer, Lewiston.
Aroostook,	Frank Kilburn, Presque Isle,	W. G. Chamberlain, Fort Fairfield.
Cumberland,	E. E. Holt, Portland,	Philip P. Thompson, Portland.
Franklin,	B. F. Makepeace, Farmington,	G. L. Pratt, Farmington.
Hancock,	Frank R. Ober, Northeast Harbor,	Geo. A. Neal, Southwest Harbor.
Kennebec,	S. J. Beach, Augusta,	H. W. Miller, Augusta.
Knox,	B. F. Adams, Rockland,	H. W. Frohock, So. Thomaston.
Oxford,	F. E. Wheeler, W. Paris,	D. M. Stewart, South Paris.
Penobscot,	H. T. Clough, Bangor,	J. B. Thompson, Bangor.
Piscataquis,	N. H. Crosby, Milo,	R. H. Marsh, Guilford.
Sagadahoc,	I. C. Irish, Bowdoinham,	R. C. Hannegan, Bath.
Somerset,	W. S. Milliken, Madison,	H. W. Smith, Norridgewock.
Waldo,	A. E. Kilgore, Brooks,	Adelbert Millett, Belfast.
Washington,	J. R. N. Smith, Milltown,	H. B. Mason, Calais.
York,	L. E. Willard, Saco,	A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association.
Write Miss Marcia Libby, 79 Bramhall St., for books and other data.



GREENWOOD MOUNTAIN

1000 ft. above sea. For Tuberculosis. Best Summer Climate in America. Open air, dietetic, nursing and medical treatment. For rates apply to **Maine State Sanatorium Association, Hebron, Me.**



THE JOURNAL



Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 6

JAN., 1914.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

- Prophylaxis in the Army. By Dr.
William H. Wilson, Ft. McDon-
ald, Cal. 1661
- Heroinism. By Paul K. Sellew,
Brookline, Mass. 1670
- A Medical Pilgrimage. By Dr.
James A. Spalding, Portland, Me. 1679

Necrology—

- Walter Johnson Pennell 1683

Editorial Comment—

- Augusta State Hospital..... 1685
- An Example for Every Hospital in
Maine 1687
- Conservation of Vision..... 1689
- Trephining for Glaucoma..... 1689

- Strychnia Poisoning 1691
- Mileage under the British Insur-
ance Laws 1691
- Too Much Light..... 1692
- Pulmonary Hemorrhage 1692
- Yellow and Blue as Danger Signals
for Railroads and Ships..... 1692
- Reputable Manufacturing Pharma-
cists do not Furnish Emmena-
gogues for Immoral Purposes..... 1693

- New and Non-official Remedies..... 1693
- Historical Notes 1695
- County News 1696
- Book Reviews 1702
- Personal News and Notes..... 1703
- Propaganda for Reform..... 1703

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.

Secretary:—J. B. Thompson, Bangor.

Vice Pres.:—First, Eben Marston, Bath.

Treasurer:—E. W. Gehring, Portland

Second, C. T. Emery, Biddeford.

BOARD OF COUNCILORS.

Term expires 1915,

“ “ “

“ “ 1914,

“ “ “

“ “ 1916,

“ “ “

J. D. Cochrane, Saco,

E. S. Cummings, Lewiston,

G. H. Coombs, Waldoboro,

G. R. Campbell, Augusta,

S. E. Webber, Calais,

T. S. Dickison, Houlton,

First District.

Second District.

Third District.

Fourth District.

Fifth District.

Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.
Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.

W. L. Haskell, Lewiston,
Frank Kilburn, Presque Isle,
B. F. Dunn, Portland,
B. F. Makepeace, Farmington,
E. J. Morrison, Bar Harbor,
Wellington Johnson, Augusta,
B. F. Adams, Rockland,
R. B. Tibbetts, Bethel,
H. T. Clough, Bangor,
N. H. Crosby, Milo,
I. C. Irish, Bowdoinham,
W. S. Milliken, Madison,
A. E. Kilgore, Brooks,
J. R. N. Smith, Milltown,
L. E. Willard, Saco,

Secretary.

S. E. Sawyer, Lewiston.
W. G. Chamberlain, Fort Fairfield.
A. P. Leighton, Jr., Portland.
G. L. Pratt, Farmington.
Geo. A. Neal, Southwest Harbor.
H. W. Miller, Augusta.
H. W. Frohock, So. Thomaston.
D. M. Stewart, South Paris.
J. B. Thompson, Bangor.
R. H. Marsh, Guilford.
R. C. Hannegan, Bath.
H. W. Smith, Norridgewock.
Adelbert Millett, Belfast.
H. B. Mason, Calais.
A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the 15th, for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM FOR OPEN AIR AND REST TREATMENT EAST PARSONSFIELD, MAINE

Portland, Address:
698 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.



THE JOURNAL

OF



THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 7

FEB., 1914.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

- Ectopic Gestation. By W. Bean
Moulton, M. D., Portland..... 1705
- The Cause and Cure of Eclampsia.
By A. P. Leighton, M. D., Port-
land 1712

Necrology—

- William Edgar Rice..... 1721
- Edward Nettleship 1722

Editorial Comment—

- Conservation of Vision..... 1724
- Another Mal-practice Suit..... 1725
- Standardization of Hospitals..... 1726

- County Secretaries and Editors..... 1728
- Workmen's Compensation Law in
Wisconsin for 1913..... 1729
- Boycott of Proposed 12th Ophthal-
mological Congress, St. Peters-
burg, 1914 1730
- Artificial Drum Heads..... 1730
- Three Successful Operations for
Perforating Ulcers in Typhoid..... 1731

-
- New and Non-official Remedies..... 1732
- Review of Current Literature..... 1734
- Book Reviews 1740
- County News 1742
- Personal News and Notes..... 1747
-

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.

Vice Pres.:—First, Eben Marston, Bath.

Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.

Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,

" " "

" " 1914,

" " "

" " 1916,

" " "

J. D. Cochrane, Saco,

E. S. Cummings, Lewiston,

G. H. Coombs, Waldoboro,

G. R. Campbell, Augusta,

S. E. Webber, Calais,

T. S. Dickison, Houlton,

First District.

Second District.

Third District.

Fourth District.

Fifth District.

Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.
Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.

W. L. Haskell, Lewiston,

T. S. Dickison, Houlton,

B. F. Dunn, Portland,

W. J. Trefethen, Wilton.

E. J. Morrison, Bar Harbor,

Wellington Johnson, Augusta,

B. F. Adams, Rockland,

R. B. Tibbetts, Bethel,

G. E. Landry, Old Town.

C. C. Hall, Jr., Foxcroft,

I. C. Irish, Bowdoinham,

W. S. Milliken, Madison,

A. E. Kilgore, Brooks,

J. R. N. Smith, Milltown,

J. W. Gordon, Ogunquit,

Secretary.

S. E. Sawyer, Lewiston.

W. G. Chamberlain, Fort Fairfield.

A. P. Leighton, Jr., Portland.

G. L. Pratt, Farmington.

Geo. A. Neal, Southwest Harbor.

H. W. Miller, Augusta.

H. W. Frohock, So. Thomaston.

D. M. Stewart, South Paris.

J. B. Thompson, Bangor.

G. E. Dore, Guilford.

R. C. Hannegan, Bath.

H. W. Smith, Norridgewock.

Adelbert Millett, Belfast.

H. B. Mason, Calais.

A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the 15th, for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM

FOR OPEN AIR AND REST TREATMENT

EAST PARSONSFIELD, MAINE

Portland, Address:

698 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.

EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.

716191 AM
BOSTON MEDICAL SOCIETY

THE JOURNAL



OF

THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 8

MAR., 1914.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

The Antitoxic Functions of the Thyroid in the Pathogenesis and Treatment of Goiter.....	1749
Sympathetic Ophthalmia, Its Genesis, Treatment and Prophylaxis.....	1756
Conservation of Hearing.....	1762
Some Phases of Mental Diseases of Importance to the General Practitioner	1765
Symposium on Exophthalmic Goitre, 1771	

Editorial Comment	1775
New and Non-official Remedies.....	1779
Review of Current Literature.....	1781
Book Reviews	1785
County News	1790
Medico-Legal	1793
Personal News and Notes.....	1797

For advertising space write to

MAINE MEDICAL JOURNAL,

Portland, Maine

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.
Vice Pres.:—First, Eben Marston, Bath.
 Second, C. T. Emery, Biddeford.
Secretary:—J. B. Thompson, Bangor.
Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,	J. D. Cochrane, Saco,	First District.
" " "	E. S. Cummings, Lewiston,	Second District.
" " 1914,	G. H. Coombs, Waldoboro,	Third District.
" " "	G. R. Campbell, Augusta,	Fourth District.
" " 1916,	S. E. Webber, Calais,	Fifth District.
" " "	T. S. Dickison, Houlton,	Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.	President.	Secretary.
Androscoggin,	W. L. Haskell, Lewiston,	S. E. Sawyer, Lewiston.
Aroostook,	T. S. Dickison, Houlton,	W. G. Chamberlain, Fort Fairfield.
Cumberland,	B. F. Dunn, Portland,	A. P. Leighton, Jr., Portland.
Franklin,	W. J. Trefethen, Wilton.	G. L. Pratt, Farmington.
Hancock,	E. J. Morrison, Bar Harbor,	Geo. A. Neal, Southwest Harbor.
Kennebec,	Wellington Johnson, Augusta,	H. W. Miller, Augusta.
Knox,	B. F. Adams, Rockland,	H. W. Frohock, So. Thomaston.
Oxford,	R. R. Tibbetts, Bethel,	D. M. Stewart, South Paris.
Penobscot,	G. E. Landry, Old Town.	J. B. Thompson, Bangor.
Piscataquis,	C. C. Hall, Jr., Foxcroft,	G. E. Dore, Guilford.
Sagadahoc,	I. C. Irish, Bowdoinham,	R. C. Hannegan, Bath.
Somerset,	W. S. Milliken, Madison,	H. W. Smith, Norridgewock.
Waldo,	A. E. Kilgore, Brooks,	Adelbert Millett, Belfast.
Washington,	J. R. N. Smith, Milltown,	H. B. Mason, Calais.
York,	J. W. Gordon, Ogunquit,	A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the first of the month for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

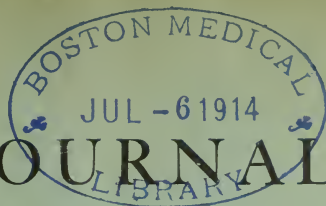
MAPLE CREST SANATORIUM FOR OPEN AIR AND REST TREATMENT EAST PARSONSFIELD, MAINE

Portland, Address:
698 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.

THE JOURNAL



OF

THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 9

APR., 1914.

\$2.00 per year

Annual Session at Portland June 10-11, 1914

TABLE OF CONTENTS

Original Articles—

- Neisser Infection of Female Genitals in relation to Pregnancy. By Ernest Boyen Young, M. D., Boston 1799
- A Case of Intermittent Claudication with X-Ray Findings. By William Pearce Coues, M. D., Boston, 1812
- Broncho-Pneumonia in Children. By A. H. Damon, M. D., Limestone, 1816
- Case Report of Pernicious Anemia. By James Melvin Sturtevant, Portland 1820
-

Review of Current Literature..... 1823

Editorial Comment—

- Civilization and Refraction..... 1827
- Ear Ache 1827
- A New Ophthalmological Journal in Germany 1828
- Common Drinking Cups and Towels, 1829
-
- Medico-Historical Notes 1830
- Propaganda for Reform..... 1833
- New and Non-official Remedies..... 1835
- County News 1836
- Personal News and Notes..... 1837
- Obituary 1839
- Program of the Maine Medical Association 1840

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.
Vice Pres.:—First, Eben Marston, Bath.
Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.
Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,
" " "
" " 1914,
" " "
" " 1916,
" " "

J. D. Cochrane, Saco,
E. S. Cummings, Lewiston,
G. H. Coombs, Waldoboro,
G. R. Campbell, Augusta,
S. E. Webber, Calais,
T. S. Dickison, Houlton,

First District.
Second District.
Third District.
Fourth District.
Fifth District.
Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.
Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.
W. L. Haskell, Lewiston,
T. S. Dickison, Houlton,
B. F. Dunn, Portland,
W. J. Trefethen, Wilton.
E. J. Morrison, Bar Harbor,
Wellington Johnson, Augusta,
B. F. Adams, Rockland,
R. R. Tibbetts, Bethel,
G. E. Landry, Old Town.
C. C. Hall, Jr., Foxcroft,
I. C. Irish, Bowdoinham,
W. S. Milliken, Madison,
A. E. Kilgore, Brooks,
J. R. N. Smith, Milltown,
J. W. Gordon, Ogunquit,

Secretary.
S. E. Sawyer, Lewiston.
W. G. Chamberlain, Fort Fairfield.
A. P. Leighton, Jr., Portland.
G. L. Pratt, Farmington.
Geo. A. Neal, Southwest Harbor.
H. W. Miller, Augusta.
H. W. Frohock, So. Thomaston.
D. M. Stewart, South Paris.
J. B. Thompson, Bangor.
G. E. Dore, Guilford.
R. C. Hannegan, Bath.
H. W. Smith, Norridgewock.
Adelbert Millett, Belfast.
H. B. Mason, Calais.
A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the first of the month for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

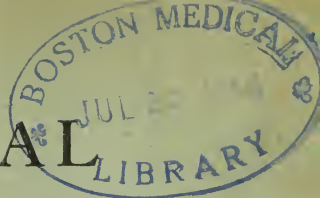
MAPLE CREST SANATORIUM FOR OPEN AIR AND REST TREATMENT EAST PARSONSFIELD, MAINE

Portland, Address:
608 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.

THE JOURNAL



OF



THE

Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 10

MAY, 1914.

\$2.00 per year

Annual Session at Portland JUNE 10-11, 1914

TABLE OF CONTENTS

Original Articles—

Conservative Treatment of Chronic
Suppurative Otitis Media. By Dr.
John H. Allen, Portland, Me..... 1841

Conservation of Vision. By Dr.
Frank Y. Gilbert, Portland, Me..... 1847

Editorial Comment—

Advertising 1858

Society for Promoting the General
Welfare of the Deaf 1859

Telephonic Rest for Busy Doctors.... 1860

Milk Investigation in Scotland..... 1860

The New Italian Method of Operat-
ing for Varicose Veins of the Leg 1861

The Eligibility of Non-Proprietary
Mixtures 1862

Medico-Legal 1863

Propaganda for Reform..... 1867

New and Non-Official Remedies..... 1869

Personal News and Notes..... 1870

County News 1871

Members of Maine Medical Associa-
tion 1874

Program Annual Meeting..... 1880

Book Reviews 1881

Review of Current Literature..... 1881

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.
Vice Pres.:—First, Eben Marston, Bath.
 Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.
Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,	J. D. Cochrane, Saco,	First District.
“ “ “	E. S. Cummings, Lewiston,	Second District.
“ “ 1914,	G. H. Coombs, Waldoboro,	Third District.
“ “ “	G. R. Campbell, Augusta,	Fourth District.
“ “ 1916,	S. E. Webber, Calais,	Fifth District.
“ “ “	T. S. Dickison, Houlton,	Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.	President.	Secretary.
Androscoggin,	W. L. Haskell, Lewiston,	S. E. Sawyer, Lewiston.
Aroostook,	T. S. Dickison, Houlton,	W. G. Chamberlain, Fort Fairfield.
Cumberland,	B. F. Dunn, Portland,	A. P. Leighton, Jr., Portland.
Franklin,	W. J. Trefethen, Wilton.	G. L. Pratt, Farmington.
Hancock,	E. J. Morrison, Bar Harbor,	Geo. A. Neal, Southwest Harbor.
Kennebec,	Wellington Johnson, Augusta,	C. J. Beach, Augusta.
Knox,	B. F. Adams, Rockland,	H. W. Frohock, So. Thomaston.
Oxford,	R. R. Tibbetts, Bethel,	D. M. Stewart, South Paris.
Penobscot,	G. E. Landry, Old Town.	J. B. Thompson, Bangor.
Piscataquis,	C. C. Hall, Jr., Foxcroft,	G. E. Dore, Guilford.
Sagadahoc,	I. C. Irish, Bowdoinham,	R. C. Hannegan, Bath.
Somerset,	W. S. Milliken, Madison,	H. W. Smith, Norridgewock.
Waldo,	A. E. Kilgore, Brooks,	Adelbert Millett, Belfast.
Washington,	J. R. N. Smith, Milltown,	H. B. Mason, Calais.
York,	J. W. Gordon, Ogunquit,	A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be in early and specify the number of insertions.

Advertisements, items, case reports, etc., must be had by the first of the month for insertion. Advertisements are published in order of their being received, with the exception of State papers which are published at once.

MAPLE CREST SANATORIUM

FOR OPEN AIR AND REST TREATMENT

EAST PARSONSFIELD, MAINE

Portland, Address:
698 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED

THE JOURNAL



Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 11

JUNE, 1914.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

- Remarks on the Feeding of Infants
and Some Diseases of the Gastro-
enteric Tract in Infancy. By John
Lovett Morse, A. M., M. D. 1883
- State Care and Training of the
Feeble-Minded in Maine. By Carl
J. Hedin, M. D., West Pownal,
Me. 1894

Case Report —

- Penetrating Gunshot Wound of the
Gravid Uterus. By R. A. Holland,
M. D., Calais, Me. 1899

Editorial Comment—

- "Damaged Goods" in Austria. 1901

- German Protests against Alleged
Medical Business Methods. 1901
- Physicians' Economic League. 1902
- A Malpractice Suit Following a
Mastoid Operation 1902

- New and Non-official Remedies. 1904
- Propaganda for Reform. 1905
- Book Reviews 1908
- Review of Current Literature. 1910
- Maine Medical Association Program. 1916
- Personal News and Notes. 1918
- County News 1920
- Index of Subjects, Vol. IV. 1922

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Portland.

OFFICERS.

President:—W. C. Peters, Bangor.
Vice Pres.:—First, Eben Marston, Bath.
 Second, C. T. Emery, Biddeford.

Secretary:—J. B. Thompson, Bangor.
Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,	J. D. Cochrane, Saco,	First District.
" " "	E. S. Cummings, Lewiston,	Second District.
" " 1914,	G. H. Coombs, Waldoboro,	Third District.
" " "	G. R. Campbell, Augusta,	Fourth District.
" " 1916,	S. E. Webber, Calais,	Fifth District.
" " "	T. S. Dickison, Houlton,	Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.	President.	Secretary.
Androscoggin,	J. A. Donovan, Lewiston,	S. E. Sawyer, Lewiston.
Aroostook,	T. S. Dickison, Houlton,	W. G. Chamberlain, Fort Fairfield.
Cumberland,	B. F. Dunn, Portland,	A. P. Leighton, Jr., Portland.
Franklin,	W. J. Trefethen, Wilton.	G. L. Pratt, Farmington.
Hancock,	E. J. Morrison, Bar Harbor,	Geo. A. Neal, Southwest Harbor.
Kennebec,	Wellington Johnson, Augusta,	C. J. Beach, Augusta.
Knox,	B. F. Adams, Rockland,	H. W. Frohock, So. Thomaston.
Oxford,	R. R. Tibbetts, Bethel,	D. M. Stewart, South Paris.
Penobscot,	G. E. Landry, Old Town.	J. B. Thompson, Bangor.
Piscataquis,	C. C. Hall, Jr., Foxcroft,	G. E. Dore, Guilford.
Sagadahoc,	E. M. Fuller, Bath,	R. C. Hannegan, Bath.
Somerset,	F. L. Tozier, Fairfield,	H. W. Smith, Norridgewock.
Waldo,	A. E. Kilgore, Brooks,	Adelbert Millett, Belfast.
Washington,	W. M. Deinstadt, St. Stephen, N.	H. B. Mason, Calais.
York,	J. W. Gordon, Ogunquit,	A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

All news items, case reports, etc., must be had by the first of the month for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM

FOR OPEN AIR AND REST TREATMENT

EAST PARSONSFIELD, MAINE

Portland, Address:

608 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.

EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.

THE JOURNAL



Maine Medical Association.

The Official Organ of the State and County Medical Societies.

VOL. IV, No. 12

JULY, 1914.

\$2.00 per year

TABLE OF CONTENTS

Original Articles—

Annual Address of President. By
W. C. Peters, M. D., Bangor, Me. 1925

Value of Social Service Work in
Hospitals as a Part of Efficient
Diagnosis and Treatment. By R.
C. Cabot, M. D., Boston, Mass..... 1930

Twilight Sleep. By Dr. H. E. Mil-
liken, Portland, Me..... 1945

Editorial Comment—

American Medical Association
Meeting 1951

Maine Medical Association Meet-
ing 1951

The President's Address..... 1953

Dr. Cabot's Oration..... 1954

Pure Water 1956

New and Non-Official Remedies..... 1957

Propaganda for Reform..... 1958

Abstracts of Current Literature..... 1960

County News 1963

Personal News and Notes..... 1964

MAINE MEDICAL ASSOCIATION.

The Next Meeting will be held at Poland Springs.

OFFICERS.

President:—H. S. Bartlett, Norway.
Vice Pres.:—First, A. L. Stanwood, Rumford.
Second, L. A. Dascombe, Skowhegan.

Secretary:—J. B. Thompson, Bangor.
Treasurer:—E. W. Gehring, Portland

BOARD OF COUNCILORS.

Term expires 1915,
" " "
" " 1917,
" " "
" " 1916,
" " "

J. D. Cochrane, Saco,
E. S. Cummings, Lewiston,
A. F. Williams, Phippsburg,
L. G. Bunker, Waterville,
S. E. Webber, Calais,
T. S. Dickison, Houlton,

First District.
Second District.
Third District.
Fourth District.
Fifth District.
Sixth District.

CONSTITUENT COUNTY SOCIETIES.

County.
Androscoggin,
Aroostook,
Cumberland,
Franklin,
Hancock,
Kennebec,
Knox,
Oxford,
Penobscot,
Piscataquis,
Sagadahoc,
Somerset,
Waldo,
Washington,
York,

President.
J. A. Donovan, Lewiston,
T. S. Dickison, Houlton,
B. F. Dunn, Portland,
W. J. Trefethen, Wilton.
E. J. Morrison, Bar Harbor,
Wellington Johnson, Augusta,
B. F. Adams, Rockland,
R. R. Tibbetts, Bethel,
G. E. Landry, Old Town.
C. C. Hall, Jr., Foxcroft,
E. M. Fuller, Bath,
F. L. Tozier, Fairfield,
A. E. Kilgore, Brooks,
W. M. Deinstadt, St. Stephen, N.
J. W. Gordon, Ogunquit,

Secretary.
S. E. Sawyer, Lewiston.
W. G. Chamberlain, Fort Fairfield.
A. P. Leighton, Jr., Portland.
G. L. Pratt, Farmington.
Geo. A. Neal, Southwest Harbor.
C. J. Beach, Augusta.
H. W. Frohock, So. Thomaston.
D. M. Stewart, South Paris.
J. B. Thompson, Bangor.
G. E. Dore, Guilford.
R. C. Hannegan, Bath.
H. W. Smith, Norridgewock.
Adelbert Millett, Belfast.
H. B. Mason, Calais.
A. L. Jones, Old Orchard.

The Maine Medical Library is available to members of the State Association. Write Miss Marcia Libby, 79 Bramhall St., for books and other data.

Members should notify the editor of any change in address, also notify him of failure to receive copy of the Journal.

Notice from members regarding sale of practice, merchandise, etc., should be sent in early and specify the number of insertions.

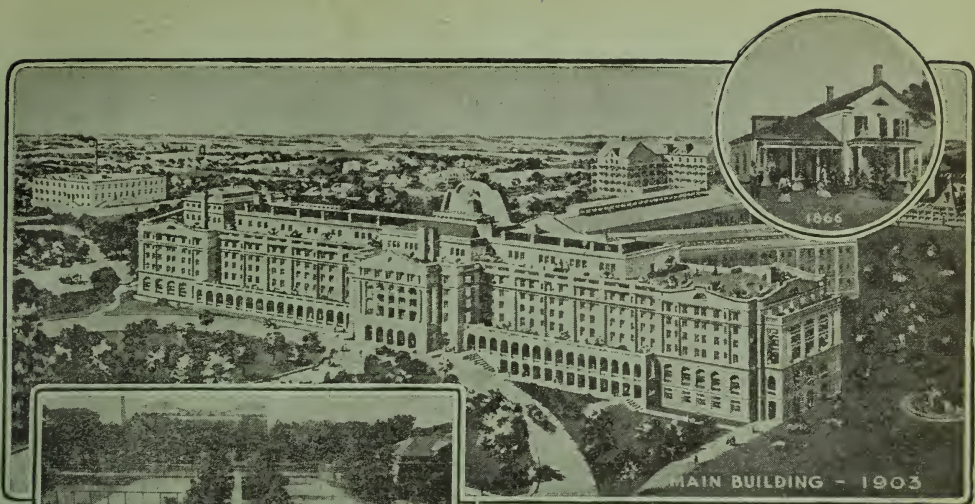
All news items, case reports, etc., must be had by the first of the month for insertion. Papers are published in order of their being received, with the exception of State papers which take precedence.

MAPLE CREST SANATORIUM FOR OPEN AIR AND REST TREATMENT EAST PARSONSFIELD, MAINE

Portland, Address:
608 CONGRESS STREET

For Particulars and Rates write to FRANCIS J. WELCH, M.D.
EAST PARSONSFIELD, MAINE

NONE BUT ETHICAL ADVERTISEMENTS WANTED.



THE Battle Creek Sanitarium is an institution for the treatment of chronic invalids—incorporated 1867—re-incor-

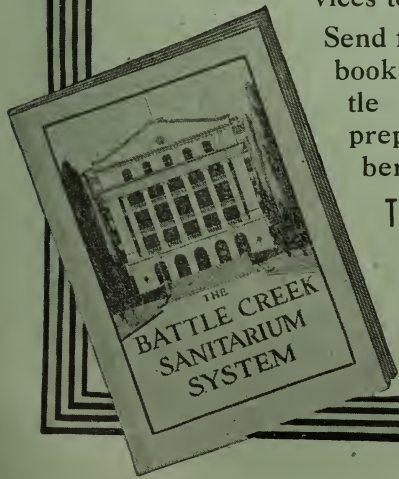
porated 1898—erected and equipped at a cost of \$2,000,000—non-profit paying—exempt from taxation under the laws of Michigan—employs 300 nurses and trained attendants and 600 other employees.

The institution has a faculty of 30 physicians, all of good and regular standing and has treated over 89,000 patients, among whom are nearly 2,000 physicians and more than 5,000 members of physicians' families.

Any physician who desires to visit the Sanitarium will receive on application a visiting guest's ticket good for three days' board and lodging in the institution—no charge is made for treatment or professional services to physicians.

Send for a copy of a profusely illustrated book of 229 pages entitled "The Battle Creek Sanitarium System," prepared especially for members of the medical profession.

The Battle Creek Sanitarium
BATTLE CREEK
MICHIGAN



The Sanitarium,
 Box 191
 Battle Creek, Michigan

I shall be glad to accept gratis a copy of your book entitled "The Battle Creek Sanitarium System."

Dr. _____
 Address _____



"I Don't Mind Taking This!"



A Great Improvement in the Best Cathartic for 3000 Years

You know all about old fashioned Castor Oil and its therapeutic advantages. But you never took pleasure in prescribing it, even though it is the best cathartic ever known. But now you CAN prescribe Castor without feeling that you are inviting an ordeal for your patient.

Kellogg's Tasteless Castor Oil

is exactly the same as old fashioned Castor Oil—just as pure, just as powerful, just as beneficial, but lo!!—the offensive taste and odor have been completely removed. Not to be classed with so-called "palatable" or "aromatic" Castors because nothing has been added to neutralize its virgin properties, nothing taken away but the taste.

You can NOW prescribe Castor Oil without working a hardship on your patients, that is, if you prescribe "Kellogg's". Children do not oppose it and adults no longer object to Castor since they can obtain it in this form. It is simply a pure unadulterated Castor Oil that goes through the entire gastro-intestinal tract with no other result than a mild peristalsis—mild in effect, never gripes and never regurgitates.

Dept. "L"

**We Would Appreciate Your Sampling Kellogg's
TASTELESS Castor Oil At Our Expense**

Please send
me (FREE) three
oz. sample bottle of
KELLOGG'S TASTE-
LESS CASTOR OIL

We are marketing Kellogg's TASTELESS Castor Oil by sincere methods. We want your co-operation in extending its use and would consider it a favor if you will send in the free sample coupon in order that you may put it to your own exhaustive tests.

Spencer Kellogg & Sons, Inc.

Crushers of Castor Beans—Refiners

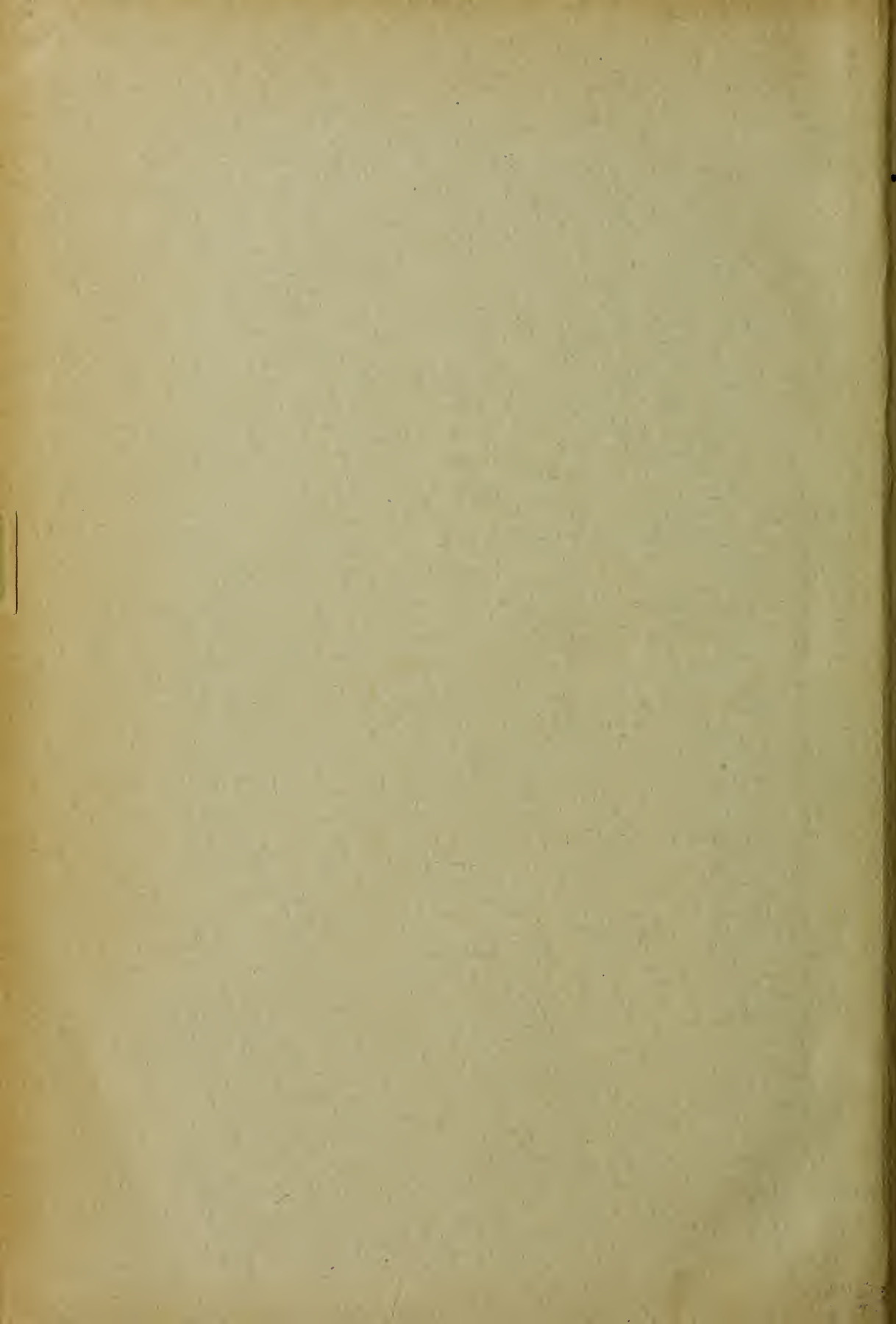
Buffalo, N. Y.

Dept. L

Name.....

City.....

Street.....



410
16.17

